

CA-IDMS[®]

Performance Monitor
System Administration
15.0



Computer Associates™

This documentation and related computer software program (hereinafter referred to as the "Documentation") is for the end user's informational purposes only and is subject to change or withdrawal by Computer Associates International, Inc. ("CA") at any time.

This documentation may not be copied, transferred, reproduced, disclosed or duplicated, in whole or in part, without the prior written consent of CA. This documentation is proprietary information of CA and protected by the copyright laws of the United States and international treaties.

Notwithstanding the foregoing, licensed users may print a reasonable number of copies of this documentation for their own internal use, provided that all CA copyright notices and legends are affixed to each reproduced copy. Only authorized employees, consultants, or agents of the user who are bound by the confidentiality provisions of the license for the software are permitted to have access to such copies.

This right to print copies is limited to the period during which the license for the product remains in full force and effect. Should the license terminate for any reason, it shall be the user's responsibility to return to CA the reproduced copies or to certify to CA that same have been destroyed.

To the extent permitted by applicable law, CA provides this documentation "as is" without warranty of any kind, including without limitation, any implied warranties of merchantability, fitness for a particular purpose or noninfringement. In no event will CA be liable to the end user or any third party for any loss or damage, direct or indirect, from the use of this documentation, including without limitation, lost profits, business interruption, goodwill, or lost data, even if CA is expressly advised of such loss or damage.

The use of any product referenced in this documentation and this documentation is governed by the end user's applicable license agreement.

The manufacturer of this documentation is Computer Associates International, Inc.

Provided with "Restricted Rights" as set forth in 48 C.F.R. Section 12.212, 48 C.F.R. Sections 52.227-19(c)(1) and (2) or DFARS Section 252.227-7013(c)(1)(ii) or applicable successor provisions.

Second Edition, October 2001

© 2001 Computer Associates International, Inc.
All rights reserved.

All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

Contents

How to use this manual	vii
Chapter 1. Installation and Customization	1-1
1.1 Overview	1-3
1.2 Modifying #PMOPT parameters	1-4
1.2.1 Syntax	1-5
1.2.2 Parameters	1-6
1.3 Modifying #PMGEN parameters	1-9
1.3.1 Syntax	1-11
1.3.2 Parameters	1-11
1.4 Defining report/billing groups	1-15
Chapter 2. Preparing to Run Reports	2-1
2.1 Overview	2-3
2.2 Archiving statistics from the DDLDCLOG area	2-4
2.2.1 Archiving — OS/390	2-5
2.2.2 Archiving — VSE/ESA	2-6
2.2.3 Archiving — VM/ESA	2-12
2.2.4 Archiving — BS2000/OSD	2-13
2.3 Using SMF to archive statistics (OS/390 only)	2-15
2.4 Sample job streams for running reports	2-20
2.4.1 Running reports — OS/390	2-20
2.4.2 Running reports — VSE/ESA	2-24
2.4.3 Running reports — VM/ESA	2-25
2.4.4 Running reports — BS2000/OSD	2-27
2.5 Replacing the COPY parameters (VSE/ESA only)	2-28
2.6 Replacing the COPY parameters for tape input (VSE/ESA only)	2-29
2.7 Note for DDR-only shops	2-30
Chapter 3. Interval Monitor Batch Reports	3-1
3.1 Overview	3-3
3.2 Requesting reports	3-5
3.2.1 Selection criteria parameters	3-5
3.2.1.1 Syntax	3-6
3.2.1.2 Parameters	3-7
3.2.1.3 Example	3-10
3.2.2 Report selection parameters	3-10
3.2.2.1 Syntax	3-11
3.2.2.2 Parameters	3-11
3.2.2.3 Example	3-13
3.3 Report samples	3-14
3.3.1 PMIRPT01: Management summary report	3-14
3.3.2 PMIRPT02: Trend analysis report	3-16
3.3.3 PMIRPT04: Summary wait detail report	3-17
3.3.4 PMIRPT05: DBkey/Area detail report	3-19
3.3.5 PMIRPT09: Shared cache summary report	3-20
3.3.6 PMIRPT10: DBGroup summary report	3-22

3.3.7	PMIRPT11: I/O by area summary report	3-22
3.3.8	PMIRPT12: I/O by file summary report	3-24
3.3.9	PMIRPT13: Buffer summary report	3-26
3.3.10	PMIRPT14: CDMSLIB summary report	3-29
3.3.11	PMIRPT15: Journal summary report	3-29
3.3.12	PMIRPT16: TP line summary report	3-32
3.3.13	PMIRPT17: Program pool summary report	3-35
3.3.14	PMIRPT18: Storage pool summary report	3-38
3.3.15	PMIRPT19: Storage waits summary report	3-41
3.3.16	PMIRPT21: I/O by area detail report	3-44
3.3.17	PMIRPT22: I/O by file detail report	3-46
3.3.18	PMIRPT23: Buffer detail report	3-48
3.3.19	PMIRPT24: CDMSLIB detail report	3-50
3.3.20	PMIRPT25: Journal detail report	3-51
3.3.21	PMIRPT27: Program pool detail report	3-53
3.3.22	PMIRPT29: Storage type detail report	3-55
3.3.23	PMIRPT30: Interval statistics summary report	3-57
3.3.24	PMIRPT32: Run unit statistics summary report	3-59
3.3.25	PMIRPT38: Journal block full detail report	3-60
3.3.26	PMIRPT40: Data sharing SYSPLEX detail report	3-62
3.3.27	PMIRPT90: Machine-readable copy	3-66
3.3.28	PMIRPT99: Input processing summary report	3-67
Chapter 4.	Application Monitor Batch Reports	4-1
4.1	Overview	4-3
4.2	Requesting reports	4-5
4.2.1	Selection criteria parameters	4-5
4.2.1.1	Syntax	4-6
4.2.1.2	Parameters	4-8
4.2.1.3	Examples	4-11
4.2.2	Report selection parameters	4-12
4.2.2.1	Syntax	4-12
4.2.2.2	Parameters	4-12
4.2.2.3	Examples	4-14
4.3	Report samples	4-15
4.3.1	PMARPT01: Task detail report	4-15
4.3.2	PMARPT02: Task summary report	4-17
4.3.3	PMARPT03: CA-ADS dialog detail report	4-20
4.3.4	PMARPT04: CA-ADS dialog summary report	4-21
4.3.5	PMARPT05: User detail report	4-21
4.3.6	PMARPT06: User summary report	4-24
4.3.7	PMARPT07: Billing group detail report	4-25
4.3.8	PMARPT08: Billing group summary report	4-27
4.3.9	PMARPT09: Abnormal termination detail report	4-29
4.3.10	PMARPT10: Abnormal termination summary report	4-30
4.3.11	PMARPT11: LTERM detail report	4-31
4.3.12	PMARPT12: LTERM summary report	4-32
4.3.13	PMARPT13: PTERM detail report	4-33
4.3.14	PMARPT14: PTERM summary report	4-34
4.3.15	PMARPT15: System detail report	4-35
4.3.16	PMARPT16: System summary report	4-36

4.3.17	PMARPT17: Database detail report	4-36
4.3.18	PMARPT18: Database summary report	4-39
4.3.19	PMARPT19: DC statistics detail report	4-40
4.3.20	PMARPT20: DC statistics summary report	4-42
4.3.21	PMARPT31: Task wait summary report	4-44
4.3.22	PMARPT36: Task wait detail report	4-46
4.3.23	PMARPT80: Load balancing report (by day and central version)	4-49
4.3.24	PMARPT81: Load balancing (by CV)	4-50
4.3.25	PMARPT82: Load balancing (All CVs)	4-51
4.3.26	PMARPT90: Machine-readable copy	4-51
4.3.27	PMARPT97: Summary recap report	4-52
4.3.28	PMARPT99: Input processing summary report	4-53
Appendix A. Changing the Billing Group Code		A-1
A.1	Overview	A-3
A.2	Changing billing groups online	A-4
A.3	Changing billing groups through a program	A-5
Appendix B. Tailoring Screens, Task Codes, and Entry Options		B-1
B.1	Overview	B-3
B.2	Customizing screen displays	B-4
B.3	Tailoring task codes	B-7
B.4	Task code entry options	B-8
B.4.1	Syntax	B-8
B.4.2	Parameters	B-9
B.4.3	Examples	B-9
Appendix C. Performance Monitor Record Descriptions		C-1
C.1	Format of Performance Monitor records	C-4
C.2	Format of SMF records	C-5
C.3	Performance Monitor record descriptions	C-6
C.3.1	#PMARADS (PMIM area wait)	C-7
C.3.2	#PMBUFDS (PMIM buffer wait)	C-10
C.3.3	#PMCDMDS (PMIM CDMSLIB wait)	C-12
C.3.4	#PMDBGDS (PMIM DBGroup wait)	C-13
C.3.5	#PMDBKDS (db-key wait)	C-14
C.3.6	#PMHDRDS (Performance Monitor record header)	C-16
C.3.7	#PMINSDS (PMIM interval statistics)	C-18
C.3.8	#PMINTDS (PMIM interval wait summary)	C-20
C.3.9	#PMJRLDS (PMIM journal wait)	C-25
C.3.10	#PMLNEDS (PMIM line wait)	C-27
C.3.11	#PMPGMDS (PMIM program pool)	C-29
C.3.12	#PMRUSDS (PMIM run units information)	C-31
C.3.13	#PMSMHDS (SMF header)	C-33
C.3.14	#PMSM4DS (SMF type 4 record)	C-34
C.3.15	#PMS30 (SMF type 30 record)	C-37
C.3.16	#PMSTGDS (PMIM storage pool data)	C-42
C.3.17	#PMSTLDS (DC log records data)	C-44
C.3.18	#PMSVXDS (ERE extension)	C-45
C.3.19	#PMTASDS (PMAM task)	C-46

C.3.20	#PMTAWDS (PMAM task wait)	C-52
C.3.21	#PMXLIDS (PMIM data sharing XES list structure information)	C-56
C.3.22	#PMXLKDS (PMIM data sharing XES lock structure information)	C-57
C.3.23	#PMXMSDS (PMIM data sharing XCF group member information)	C-58
C.3.24	#PMYPEDS (PMIM storage type wait)	C-59
Index		X-1

How to use this manual

What this manual is about

This manual includes the following major topics:

- Installing Performance Monitor
- Running Performance Monitor reports
- Supervising Performance Monitor billing groups
- Tailoring Performance Monitor screen displays

Who should use this manual

- The person installing the Performance Monitor system
- The administrator responsible for setting up and running Performance Monitor reports
- The Performance Monitor administrator responsible for tailoring system screens

How information is presented

This document contains four chapters and three appendixes:

- Chapter 1, "Installation and Customization" — Provides an overview of the installation process; also describes how to modify parameters in #PMOPT and #PMGEN and how to define billing groups
- Chapter 2, "Preparing to Run Reports" — Describes how to archive statistics so they can be reported using a CULPRIT job stream; also provides sample JCL/commands for running the CULPRIT reports
- Chapter 3, "Interval Monitor Batch Reports" — Describes report parameters and gives an overview and sample of each Interval Monitor report
- Chapter 4, "Application Monitor Batch Reports" — Describes report parameters and gives an overview and sample of each Application Monitor report
- Appendix A, "Changing the Billing Group Code" — Describes how to change billing groups online or using a program
- Appendix B, "Tailoring Screens, Task Codes, and Entry Options" — Describes how to tailor Performance Monitor screens, task codes, and task code entry options
- Appendix C, "Performance Monitor Record Descriptions" — Provides record layouts for use in batch reporting

How product names are referenced

This manual uses the term CA-IDMS to refer to any one of the following CA-IDMS components:

- CA-IDMS/DB — The database management system
- CA-IDMS/DC — The data communications system and proprietary teleprocessing monitor
- CA-IDMS/UCF — The universal communications facility for accessing CA-IDMS database and data communications services through another teleprocessing monitor, such as CICS
- CA-IDMS/DDS — The distributed database system

This manual uses the terms DB, DC, UCF, DC/UCF, and DDS to identify the specific CA-IDMS component only when it is important to your understanding of the product.

Related CA-IDMS documentation

Use this document in conjunction with these CA-IDMS documents:

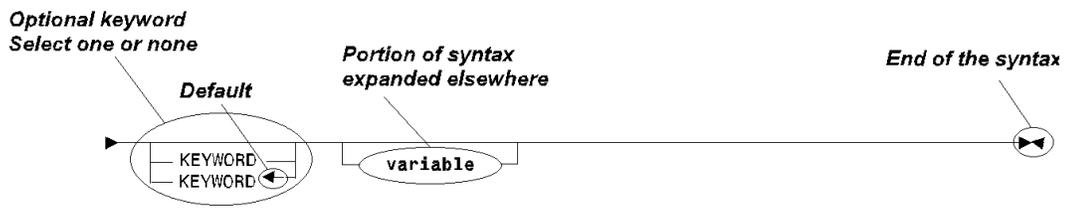
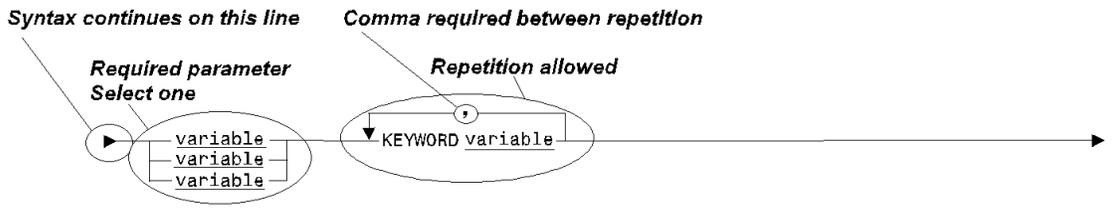
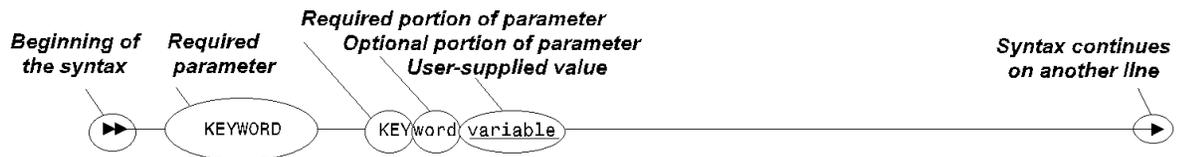
- *CA-IDMS Installation — OS/390*
- *CA-IDMS Installation — VSE/ESA*
- *CA-IDMS Installation — VM/ESA*
- *CA-IDMS Installation — BS2000/OSD*
- *CA-IDMS Performance Monitor User Guide*
- *CA-IDMS System Generation*
- *CA-IDMS System Operations*
- *CA-IDMS System Tasks and Operator Commands*
- *IDD DDDL Reference*
- *CA-IDMS Utilities*

Understanding syntax diagrams

Look at the list of notation conventions below to see how syntax is presented in this manual. The example following the list shows how the conventions are used.

UPPERCASE OR SPECIAL CHARACTERS	Represents a required keyword, partial keyword, character, or symbol that must be entered completely as shown.
lowercase	Represents an optional keyword or partial keyword that, if used, must be entered completely as shown.
<u>underlined lowercase</u>	Represents a value that you supply.
←	Points to the default in a list of choices.
lowercase bold	Represents a portion of the syntax shown in greater detail at the end of the syntax or elsewhere in the document.
▶—————▶	Shows the beginning of a complete piece of syntax.
—————▶◀	Shows the end of a complete piece of syntax.
—————▶	Shows that the syntax continues on the next line.
▶—————▶	Shows that the syntax continues on this line.
—————▶	Shows that the parameter continues on the next line.
▶—————▶	Shows that a parameter continues on this line.
▶— parameter —▶	Shows a required parameter.
▶— parameter —▶ └── parameter ┘	Shows a choice of required parameters. You must select one.
▶— parameter —▶ └── parameter ┘	Shows an optional parameter.
▶— parameter —▶ └── parameter ┘	Shows a choice of optional parameters. Select one or none.
▶— parameter —▶ └── parameter ┘	Shows that you can repeat the parameter or specify more than one parameter.
▶— parameter —▶ └── parameter ┘	Shows that you must enter a comma between repetitions of the parameter.

Sample syntax diagram



Chapter 1. Installation and Customization

- 1.1 Overview 1-3
- 1.2 Modifying #PMOPT parameters 1-4
 - 1.2.1 Syntax 1-5
 - 1.2.2 Parameters 1-6
- 1.3 Modifying #PMGEN parameters 1-9
 - 1.3.1 Syntax 1-11
 - 1.3.2 Parameters 1-11
- 1.4 Defining report/billing groups 1-15

1.1 Overview

To install the CA-IDMS Performance Monitor by itself or in conjunction with other CA-IDMS products, you use the CA-IDMS installation tape.

To install CA-IDMS Performance Monitor, you complete the following steps:

1. Code any installation parameters specific to Performance Monitor
2. Generate the installation job control
3. Optionally modify the parameters of #PMOPT, the macro that specifies runtime options for Performance Monitor
4. Execute the installation job stream
5. Optionally modify the parameters of the #PMGEN macro embedded in the three Performance Monitor initialization modules
6. Define report/billing groups for the Application Monitor
7. Restart the system to activate Performance Monitor

This chapter provides information on #PMOPT and #PMGEN. It also describes how you can define report/billing groups.

►► For detailed information on installation, refer to the CA-IDMS installation documentation for your operating system.

1.2 Modifying #PMOPT parameters

The installation program generates #PMOPT, a macro that specifies runtime options for Performance Monitor. You can modify the #PMOPT parameters to suit your environment. Syntax and parameter descriptions for #PMOPT follow.

Tip: You can modify the #PMOPT macro at any time, not just during the installation process.

1.2.1 Syntax

▶ #PMOPT AMACT= YES NO ,AMDCLOG= YES NO

▶ ,AMSMF= YES NO ←

(AMSMF applies to OS/390 only)

▶ ,AMSMFSZ= 8180 ← smf-block-size

(AMSMFSZ applies to OS/390 only)

▶ ,DBKMAX= 5 ← db-keys-per-task

▶ ,DCSTATS= YES NO ←

▶ ,DLGNAME= SCREEN ← FIRST

▶ ,ENTMAX= 50 ← maximum-entries

▶ ,IMACT= YES NO

▶ ,IMDCLOG= YES NO

▶ ,IMSMF= YES NO ←

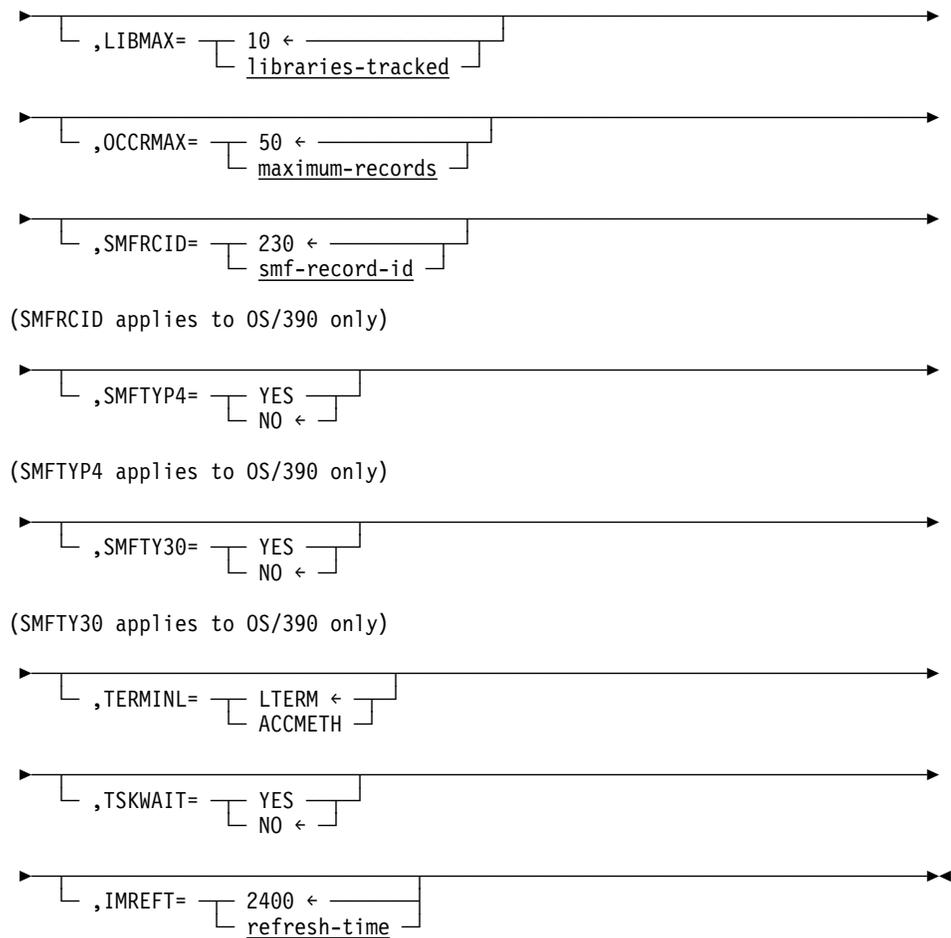
(IMSMF applies to OS/390 only)

▶ ,IMSMFSZ= 8180 ← smf-block-size

(IMSMFSZ applies to OS/390 only)

▶ ,INTVMAX= 20 ← maximum-intervals

▶ ,INTVSIZ= 10 ← interval-size



1.2.2 Parameters

AMACT=YES/NO

Specifies whether the Application Monitor is activated automatically when the DC/UCF system is started. This is a required parameter; there is no default. If you specify YES, Performance Monitor continuously captures task statistics regardless of the status of the Application Monitor's online component.

AMDCLOG=YES/NO

Specifies whether information collected by the Application Monitor should be written to the system log area. This is a required parameter; there is no default. If you specify NO, Application Monitor statistics can be viewed online only.

OS/390 users: If you specify AMDCLOG=NO and you want the information to be available for batch reporting, you must specify AMSMF=YES.

AMSMF=YES/NO

(OS/390 only) Specifies whether information collected by the Application Monitor should be written to the SMF job accounting file. The default is NO. If you specify YES, you must include the SMFRCID parameter. If you specify NO and want data available for batch reports, you must also specify AMDCLOG=YES.

AMSMFSZ=8180/smf-block-size

(OS/390 only) Specifies the maximum number of bytes in Application Monitor SMF statistics blocks (1024-32764). The default is 8180. This parameter is applicable only if AMSMF=YES.

DBKMAX=5/db-keys-per-task

Specifies the number of db-keys the Interval Monitor should track (0-20). The default is 5. This parameter is applicable only if IMACT=YES.

DCSTATS=YES/NO

Specifies whether the standard DC task statistics block should be written to the DC/UCF system log area. The default is NO.

If you specify YES, the standard DC statistics block, as well as Performance Monitor statistics records, is written to the log at task termination.

DLGNAME=

Specifies which CA-ADS dialog is recorded by the Application Monitor as the program name.

SCREEN

Specifies that the name of the dialog that issued the mapout request is to be used. SCREEN is the default.

FIRST

Specifies that the name of the first (high level) dialog is to be used.

ENTMAX=50/maximum-entries

Specifies the maximum number of entities that will be monitored online by the Application Monitor at any given time (0-1,000). The default is 50.

IMACT=YES/NO

Specifies whether the Interval Monitor is activated automatically when the DC/UCF system is started. This is a required parameter; there is no default.

IMDCLOG=YES/NO

Specifies whether information collected by the Interval Monitor is to be written to the DC/UCF system log area. This is a required parameter; there is no default. If you specify NO, Interval Monitor statistics can be viewed online only.

OS/390 users: If you specify IMDCLOG=NO and you want the information to be available for batch reporting, you must specify IMSMF=YES.

IMSMF=YES/NO

(OS/390 only) Specifies whether information collected by the Interval Monitor should be written to the SMF job accounting file. The default is NO. If you specify NO and want the information available for batch reporting, you must specify IMDCLOG=YES.

IMSMFSZ=8180/smf-block-size

(OS/390 only) Specifies the number of bytes in Interval Monitor SMF statistics blocks (1,024-32,764). The default is 8,180. This parameter is applicable only if IMSMF=YES.

INTVMAX=20/maximum-intervals

Specifies the maximum number of intervals to be maintained by the online component of the Interval Monitor (0-1,000). The default is 20. Once the maximum number is reached during processing, the system wraps to begin overwriting with the earliest interval.

If you specify 0, the online component of the Interval Monitor is unavailable.

INTVSIZ=10/interval-size

Specifies the number of minutes in each interval maintained by the Interval Monitor (5-1,440). The default is 10.

LIBMAX=10/libraries-tracked

Specifies the number of libraries (CDMSLIB, CDMSL $_{nnn}$, and so forth) the Interval Monitor should maintain (0-1,000). The default is 10.

VSE/ESA users: VSE/ESA sites should specify either 1 or 0. 0 indicates that no library statistics are to be maintained.

OCCRMAX=50/maximum-records

Specifies the default number of statistics records accumulated by the Application Monitor for each monitored entity (0-9999). The default is 50.

If you specify 0, the online component of the Application Monitor is unavailable.

SMFRCID=230/smf-record-id

(OS/390 only) Specifies the SMF user record ID for Interval Monitor and Application Monitor statistics records written to the SMF file (128-255). The default is 230. This parameter is applicable only if IMSMF=YES or AMSMF=YES.

SMFTYP4=YES/NO

(OS/390 only) Specifies whether Type 4 SMF records (step termination records) are created and written to the SMF file. The default is NO. This parameter is applicable only if AMACT=YES.

SMFTYP30=YES/NO

(OS/390 only) Specifies whether Type 30 SMF records (step termination records) are created and written to the SMF file. The default is NO. This parameter is applicable only if AMACT=YES.

TERMINL=LTERM/ACCMETH

Specifies whether the Application Monitor tracks the logical terminal or the access method for use in LTERM ID fields. The default is LTERM.

TSKWAIT=YES/NO

Specifies whether task-wait statistics should be collected. The default is NO. The statistics are written to the log area if you specify AMDCLOG=YES.

OS/390 users: Statistics are written to the SMF job accounting file if you specify AMSMF=YES.

IMREFT=refresh-time

Specifies the time in the format *hhmm* (24-hour clock) to initialize the Interval Monitor data collection buckets. Initialization is performed at the end of the interval in which the specified time falls.

1.3 Modifying #PMGEN parameters

Each component of the Performance Monitor has its own initialization module, automatically generated when you run CAIIJMP.

Component	Initialization module
Realtime Monitor	PMRTINIT
Interval Monitor	PMIMINIT
Application Monitor	PMAMINIT

Steps for modifying #PMGEN: You can modify the initialization modules by modifying the parameters of the #PMGEN macro embedded in each module. Follow these steps:

1. Examine the default #PMGEN macro generated for each Performance Monitor module.
2. Modify the parameters of each #PMGEN macro as appropriate for your site. The source code is located in the source library (SRCLIB) created during installation.
3. Assemble the modified initialization module.
4. Link edit the modified initialization module.

OS/390 and VSE/ESA users: Any modifications to the CA-IDMS load libraries should be applied by SMP/E for OS/390 and MSHP for VSE/ESA. For information on how to assemble and link edit a module using SMP/E, refer to *CA-IDMS Installation — OS/390*. For sample JCL for the #PMGEN macro, see the sample JCL library provided at installation. For information on how to assemble and link edit a module using MSHP, refer to *CA-IDMS Installation — VSE/ESA*.

Default #PMGEN macros: The following are #PMGEN defaults for each component of the Performance Monitor. Note that X represents the continuation character you must code in column 72. The continuation character can be any nonblank character.

#PMGEN defaults for the Realtime Monitor

```
#PMGEN CASE=UPLow,           X
        CONV=YES,           X
        DSTREAM=MODIFIED,   X
        EDIT=YES,          X
        PFKEYS=24,         X
        REFRESH=10,        X
        SITESAVE=YES,      X
        SNAP=YES,          X
        SORT=YES,          X
        STAE=NO,           X
        USERSAV=YES
```

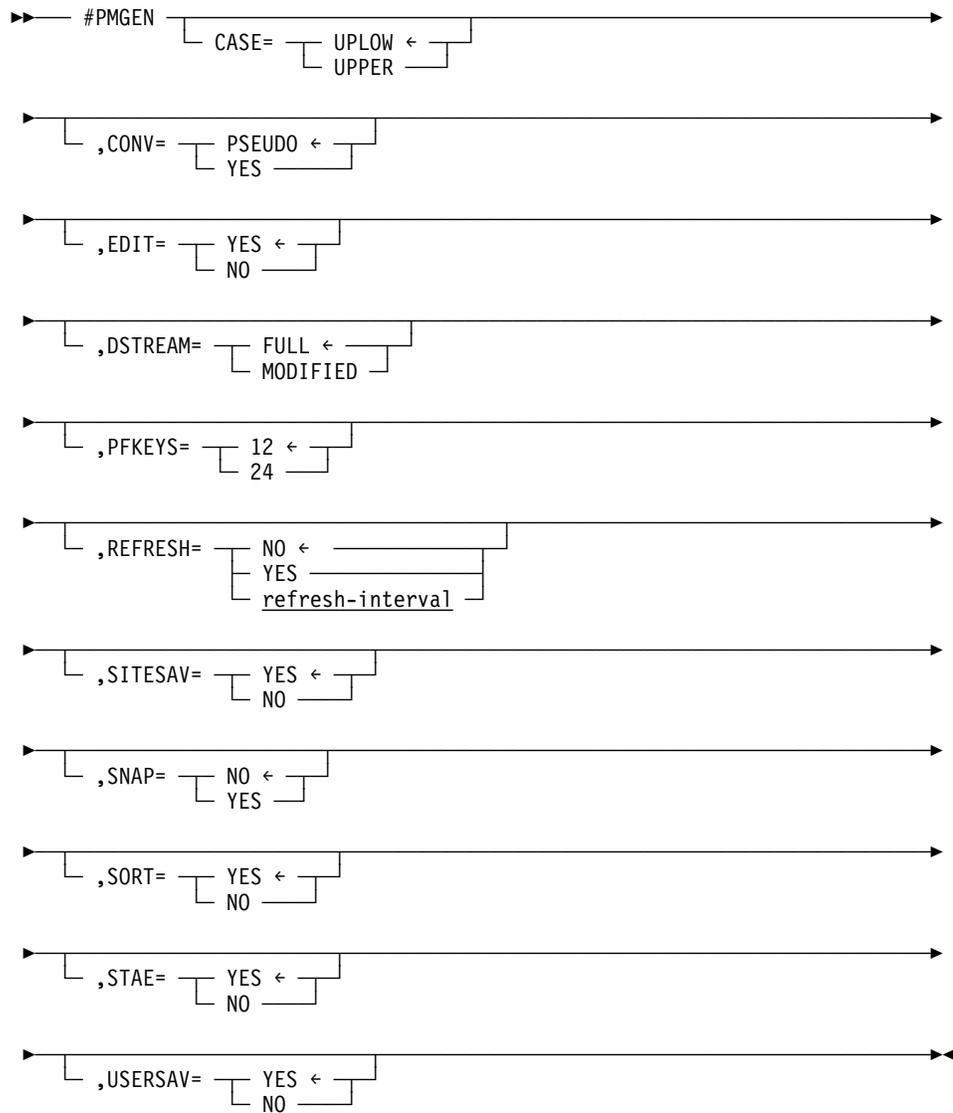
#PMGEN defaults for the Interval Monitor

```
#PMGEN CASE=UPLow,           X
        CONV=PSEUDO,        X
        DSTREAM=FULL,       X
        EDIT=YES,           X
        PFKEYS=24,         X
        REFRESH=NO,         X
        SITESAVE=YES,      X
        SNAP=YES,          X
        STAE=NO,           X
        USERSAV=YES
```

#PMGEN defaults for the Application Monitor

```
#PMGEN CASE=UPLow,           X
        CONV=PSEUDO,        X
        DSTREAM=FULL,       X
        EDIT=YES,           X
        PFKEYS=24,         X
        REFRESH=NO,         X
        SITESAVE=YES,      X
        SNAP=YES,          X
        SORT=YES,          X
        STAE=NO,           X
        USERSAV=YES
```

1.3.1 Syntax



1.3.2 Parameters

CASE=UPLow/UPPER

Specifies if literals and help text is to appear in uppercase and lowercase (UPLow) or uppercase only (UPPER). The default is UPLow. Specify UPPER if the lowercase English alphabet causes problems with your site's terminals.

CONV=PSEUDO/YES

Indicates if the component is to run pseudo-conversationally. PSEUDO (default) indicates that it runs pseudo-conversationally. YES indicates that it runs conversationally. Generally, this parameter is PSEUDO for the Interval and Application Monitors; YES for the Realtime Monitor. NO is a synonym for PSEUDO.

EDIT=YES/NO

Specifies whether the person running the monitor can edit windows. The default is YES.

DSTREAM=FULL/MODIFIED

Specifies whether the data stream sent to the terminal is to be compressed. FULL (default) indicates that the data stream will not be compressed and will use relatively less CPU time but more transmission time. MODIFIED indicates that the data stream will be compressed and will use relatively more CPU time but less transmission time.

PFKEYS=12/24

Defines the number of PF keys in use. The default is 12. If you specify 24, any keys not explicitly used by the monitors are shadow keys (PF17 shadows PF5, PF18 shadows PF6, and so forth).

REFRESH=NO/YES/refresh-interval

Specifies whether Performance Monitor automatically refreshes monitor screens with current statistics. The default is NO. This parameter should be NO for the Interval and Application Monitors. Specify NO, YES, or *refresh-interval* for the Realtime Monitor:

- YES — the default refresh interval is 10 seconds
- *refresh-interval* — Performance Monitor automatically refreshes the screen at the interval specified; *Refresh-interval* must be in the range 1-99
- YES or *refresh-interval* — Performance Monitor refreshes the screen automatically regardless of the CONV=PSEUDO/YES specification

Note: By default, REFRESH=NO is forced for UCF terminals regardless of the setting in #PMGEN. The REFRESH value will be honored for the setting in #PMGEN. The REFRESH value will be honored for UCF terminals if optional bit 34 is set in RHDCOPTF. Limitations still exist, however, on the use of automatic refresh when using UCF terminals. These limitations arise because the REFRESH option is implemented by issuing a READ BUFFER instead of a READ MODIFIED command when it is checking for input before refreshing the screen.

The limitations are:

- The VM/ESA front-end UCF module does not support screen refresh. Optional bit 34 should not be applied to a back-end that is to be accessed through UCFCMS.
- Screen refresh is not supported for any other environment where READ BUFFER is not supported. These include TCAM terminals and VM/ESA PASSTHRU. Do not set the optional bit in these environments.
- Under TSO, the front-end UCF module must be created with the parameter VTAM=YES on the #UCFTSO parameter. This is the recommended value for most sites. See the Systems Operations guide for more information.

- Under CICS, we recommend that a special version of the UCF front-end be created for use only with PERFMON. Create this version by assembling the #UCFCICS macro with the parameters RESETKB=ASIS and LASTOUT=TASKEND. This lets multiple WRITE datastreams be sent to the terminal between READ commands, but allows input from the terminal while the front-end UCF task is running. Without these options, terminal hangs or CICS task abends such as ATNI or ATCV can result. These parameters might not be desirable for UCFCICS applications other than PMRM. That is why we recommend a special UCFCICS module.

Also ensure the CICS terminal control table entry has a TIOAL buffer size large enough to accommodate the realtime monitor READ BUFFER and datastream write commands. In addition, each #UCFUTD macro associated with the UCF front-end should specify BUFSIZ=8192.

Note that the READ BUFFER command causes the front-end UCFCICS task, which is accessing PMRM, to run conversationally. This means that a CICS task will be running as long as PMRM is running. This task might use increasing amounts of CICS resources such as storage. This might necessitate terminating the PMRM task periodically to release resources.

- For all TP monitors, UCF lets the terminal operator modify the PMRM session only at the REFRESH interval. Attempts to update the screen prematurely can result in problems such as INPUT INHIBITED (X-F at the bottom of the terminal screen). To avoid these problems, the terminal operator should observe the following procedures before pressing a function key or the Enter key:
 - Move the cursor off the command line.
 - Wait for the <<SCREEN HELD>> message to appear on the screen. This indicates that PMRM has issued the READ BUFFER and recognized that operator input is pending.
 - Press the desired function key or Enter key.

It may be helpful to reduce the default refresh interval of 10 seconds by reassembling the #PMGEN macro and relinking the PMRTINIT program. Alternatively, the REFRESH command can be issued from within PMRM.

Note that optional bit 34 has no effect on non-UCF terminals.

SITESAV=YES/NO

Specifies whether a Performance Monitor user can save version 1 of the monitor screens. The default is YES. As system administrator, you can tailor the screens with YES at installation and then specify NO once Performance Monitor is in production. See Appendix B, “Tailoring Screens, Task Codes, and Entry Options” on page B-1, for more information about tailoring screen displays.

SNAP=NO/YES

Specifies whether Performance Monitor writes a snap dump to the log file whenever the STAE detects an abend within the Performance Monitor. The default is NO. If SNAP=YES, STAE must also be YES.

SORT=YES/NO

Specifies whether the Performance Monitor user can sort windows. The default is YES.

STAE=YES/NO

Specifies whether the Performance Monitor STAE receives control when an abend occurs within the Performance Monitor. The default is YES.

USERSAV=YES/NO

Specifies whether users can save a test version of the monitor screens (any version other than version 1). The default is YES. See Appendix B, "Tailoring Screens, Task Codes, and Entry Options" on page B-1 for more information about saving modified screen versions.

1.4 Defining report/billing groups

Report/billing groups are used by the Application Monitor to categorize users for chargeback, accounting, and reporting purposes. Often, report/billing groups represent a division, department, development team, or application.

Associating users with a group: You associate a user with a group using the installation code in the system profile or user profile. System and user profiles are created using the CA-IDMS Command Facility.

For information about profiles, see the *IDD DDDL Reference* manual or the *CA-IDMS Security Administration* manual.

Chapter 2. Preparing to Run Reports

2.1 Overview	2-3
2.2 Archiving statistics from the DDLDCLOG area	2-4
2.2.1 Archiving — OS/390	2-5
2.2.2 Archiving — VSE/ESA	2-6
2.2.3 Archiving — VM/ESA	2-12
2.2.4 Archiving — BS2000/OSD	2-13
2.3 Using SMF to archive statistics (OS/390 only)	2-15
2.4 Sample job streams for running reports	2-20
2.4.1 Running reports — OS/390	2-20
2.4.2 Running reports — VSE/ESA	2-24
2.4.3 Running reports — VM/ESA	2-25
2.4.4 Running reports — BS2000/OSD	2-27
2.5 Replacing the COPY parameters (VSE/ESA only)	2-28
2.6 Replacing the COPY parameters for tape input (VSE/ESA only)	2-29
2.7 Note for DDR-only shops	2-30

2.1 Overview

This chapter describes how to archive Performance Monitor statistics so they can be used as input for Performance Monitor batch reports. Sample JCL and commands for running these batch reports are also provided.

►► For descriptions of the Interval Monitor batch reports, see Chapter 3, “Interval Monitor Batch Reports” on page 3-1. For descriptions of the Application Monitor batch reports, see Chapter 4, “Application Monitor Batch Reports” on page 4-1.

Creating statistics archives: Before generating the Performance Monitor batch reports, you must archive the collected statistics to tape. This tape serves as input to the reports. Any number of archive tapes can be input to a single run.

The procedure for archiving statistics varies, depending on where the statistics are written to:

- If statistics are written to the DDLDCLOG area of the dictionary you archive using the ARCHIVE LOG utility statement (see 2.2, “Archiving statistics from the DDLDCLOG area” on page 2-4)
- If statistics are written to the system management facility (SMF) job accounting file (OS/390 systems only), then you archive using the PMSMFEX macro (see 2.3, “Using SMF to archive statistics (OS/390 only)” on page 2-15)

►► For SMF and archive file record layouts, see Appendix C, “Performance Monitor Record Descriptions” on page C-1.

Job-step restriction: You cannot request Interval Monitor and Application Monitor reports in the same CA-CULPRIT job step. To get both sets of reports in one run, use two CA-CULPRIT job steps. You can minimize tape handling by first using PMARPT90 and PMIRPT90 to produce machine-readable files of Performance Monitor statistics.

2.2 Archiving statistics from the DDLDCLOG area

If statistics are written to the DDLDCLOG area during online processing, they are maintained in the DDLDCLOG area of the dictionary. Statistics are written to the DDLDCLOG area as follows:

- Interval Monitor — Performance Monitor writes statistics to DDLDCLOG if the system administrator specifies `IMDCLOG=YES` in the `#PMOPT` macro.
- Application Monitor — Performance Monitor writes statistics to DDLDCLOG if the system administrator specifies `AMDCLOG=YES` in the `#PMOPT` macro.

To archive the statistics from the DDLDCLOG area, use the batch component of the command facility to enter the `ARCHIVE LOG` statement.

►► For more information about `ARCHIVE LOG`, refer to *CA-IDMS Utilities*. For more information about the command facility, refer to *CA-IDMS Command Facility*.

Sample JCL: You can use the sample JCL in the following sections to archive the the statistics from the log area. Remember to supply the appropriate values for variables (shown in italics). Descriptions of variables are provided.

2.2.1 Archiving — OS/390

IDMSBCF (ARCHIVE LOG STATEMENT) (OS/390)

```

//*****
//*
//*      ARCHIVE LOG STATEMENT ENTERED USING IDMSBCF      *
//*      (creates the input file for running reports)      *
//*
//*****
//archlog EXEC PGM=IDMSBCF,REGION=1024K
//STEPLIB DD DSN=idms.dba.loadlib,DISP=SHR
//          DD DSN=idms.loadlib,DISP=SHR
//dclog   DD DSN=idms.system.ddlclg,DISP=SHR
//dcmsg   DD DSN=idms.sysmsg.ddlclmsg,DISP=SHR
//secdd   DD DSN=idms.sysuser.ddlsec,DISP=SHR
//sysjrn1 DD DUMMY
//SYS001  DD DUMMY
//SYS002  DD DSN=idms.archive,DISP=(NEW,CATLG),UNIT=tape,
//          DCB=(RECFM=VB,LRECL=280,BLKSIZE=23244)
//SYSLST DD SYSOUT=A
//SYSIDMS DD *
DMCL=dmc1-name
Other SYSIDMS parameters, as appropriate
/*
//SYSIPT DD *
ARCHIVE LOG;
/*

```

►► For information on IDMSBCF (the batch command facility), refer to *CA-IDMS Command Facility*.

<u>archive</u>	Name of job step for archiving
<u>idms.dba.loadlib</u>	Dataset name of the load library containing the DMCL and database name table load modules
<u>idms.loadlib</u>	Dataset name of the load library containing the CA-IDMS executable modules
<u>dclog</u>	Ddname of the log area of the dictionary
<u>idms.system.ddldclog</u>	Dataset name of the log area of the dictionary
<u>dcmsg</u>	Ddname of the system message (DDLDCMSG) area
<u>idms.sysmsg.ddldcmsg</u>	Dataset name of the system message (DDLDCMSG) area
<u>secdd</u>	Ddname of the user catalog (required if security is turned on)
<u>idms.sysuser.ddlsec</u>	Dataset name of the user catalog; this dataset can be defined dynamically through the DMCL)
<u>sysjrn1</u>	Ddname of the journal file
<u>idms.archive</u>	Name of the archive file
<u>tape</u>	Symbolic device name of the archive dataset file
<u>dmc1-name</u>	Name of the DMCL load module to use in local mode ▶▶ For information on all SYSIDMS parameters, refer to <i>CA-IDMS Database Administration</i> .

2.2.2 Archiving — VSE/ESA

IDMSBCF (ARCHIVE LOG STATEMENT) (VSE/ESA)

```

*****
*
*          ARCHIVE LOG STATEMENT ENTERED USING IDMSBCF          *
*          (creates the input file for running reports)          *
*****
// EXEC PROC=IDMSLBLS
// TLBL   sysjrn1,'idms.tapejrn1',,nnnnnn,,f
// ASSGN  SYS008,TAPE,VOL=nnnnnn
// ASSGN  SYS012,IGN
// ASSGN  SYS009,IGN
// ASSGN  SYS001,IGN
// TLBL   V002,'idms.archive'
// ASSGN  SYS002,'ttt'
// EXEC  IDMSBCF,SIZE=1024K
ARCHIVE LOG;
/*

```

▶▶ For information about IDMSBCF (the batch command facility), refer to *CA-IDMS Command Facility*.

<u>IDMSLBLS</u>	Name of the procedure (provided at installation) that contains the file definitions for CA-IDMS dictionaries and databases ▶▶ For a complete listing of IDMSLBLS, see "IDMSLBLS procedure" below.
<u>sysjrn1</u>	Name of the tape journal file
<u>idms.tapejrn1</u>	ID of the tape journal file
<u>nnnnnn</u>	Volume serial number
<u>f</u>	Number of the tape journal file
<u>idms.archive</u>	Name of archive tape
<u>ttt</u>	Physical device assignment

Runtime parameters: IDMSLBLS references the SYSIDMS file, a file in which you can specify parameters that describe physical requirements (such as DMCL or dictionary to access), runtime parameters, or operating system-specific file information. For this job stream, you should specify the DICTNAME parameter.

▶▶ For information on all SYSIDMS parameters, refer to *CA-IDMS Database Administration*.

IDMSLBLS procedure: IDMSLBLS is a procedure that contains file definitions for the dictionaries, sample databases, disk journal files, and SYSIDMS file provided during installation.

You can tailor the following IDMSLBLS procedure (provided on the installation tape) to reflect the filenames and definitions in use at your site. Reference IDMSLBLS as shown in the previous VSE/ESA JCL job stream.

2.2 Archiving statistics from the DDLDCLOG area

```
* ----- LIBDEFS -----
// LIBDEF *,SEARCH=idmslib.sublib
// LIBDEF *,CATALOG=user.sublib
/* ----- LABELS -----
// DLBL idmslib, 'idms.library', 1999/365
// EXTENT ,nnnnnn, ,,ssss, 1500
// DLBL dccat, 'idms.system.dccat', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 31
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dccatl, 'idms.system.dccatlod', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 6
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dccatx, 'idms.system.dccatx', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 11
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dcdml, 'idms.system.ddldml', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 101
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dclod, 'idms.system.ddldclod', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 21
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dclog, 'idms.system.ddldclog', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 401
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dcrun, 'idms.system.ddldcrun', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 68
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dcscr, 'idms.system.ddldcscr', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 135
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dcmsg, 'idms.sysmsg.ddldcmsg', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 201
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dclscr, 'idms.sysloc.ddlocscr', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 6
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dirldb, 'idms.sysdirl.ddldml', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 201
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL dirllod, 'idms.sysdirl.ddldclod', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 2
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL empdemo, 'idms.empdemo1', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 11
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL insdemo, 'idms.insdemo1', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 6
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL orgdemo, 'idms.orgdemo1', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 6
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL empldem, 'idms.sqldemo.empldemo', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 11
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL infodem, 'idms.sqldemo.infodemo', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 6
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL projdem, 'idms.projseg.projdemo', 1999/365, DA
// EXTENT SYSnnn, ,nnnnnn, ,,ssss, 6
// ASSGN SYSnnn, DISK, VOL=nnnnnn, SHR
```

```

// DLBL   indxdem, 'idms.sqldemo.indxdemo', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 6
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   sysctl, 'idms.sysctl', 1999/365, SD
// EXTENT SYSnnn, nnnnnn, , , ssss, 2
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   secdd, 'idms.sysuser.ddlsec', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 26
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   dictdb, 'idms.appldict.ddldml', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 51
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   d1oddb, 'idms.appldict.ddldclod', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 51
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   sqldd, 'idms.syssql.ddlcat', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 101
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   sqllod, 'idms.syssql.ddlcatl', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 51
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   sqlxdd, 'idms.syssql.ddlcatx', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 26
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   asfdml, 'idms.asfdict.ddldml', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 201
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   asflod, 'idms.asfdict.asflod', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 401
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   asfdata, 'idms.asfdict.asfdata', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 201
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   ASFDEFN, 'idms.asfdict.asfdefn', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 101
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   j1jrn1, 'idms.j1jrn1', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 54
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   j2jrn1, 'idms.j2jrn1', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 54
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   j3jrn1, 'idms.j3jrn1', 1999/365, DA
// EXTENT SYSnnn, nnnnnn, , , ssss, 54
// ASSGN  SYSnnn, DISK, VOL=nnnnnn, SHR
// DLBL   SYSIDMS, '#SYSIPT', 0, SD
/+
/*

```

<u>idmslib.sublib</u>	Name of the sublibrary within the library containing CA-IDMS modules
<u>user.sublib</u>	Name of the sublibrary within the library containing user modules
<u>idmslib</u>	Name of the file containing CA-IDMS modules
<u>idms.library</u>	ID associated with the file containing CA-IDMS modules

<u>SYSnnn</u>	Logical unit of the volume for which the extent is effective
<u>nnnnnn</u>	Volume serial identifier of appropriate disk volume
<u>ssss</u>	Starting track (CKD) or block (FBA) of disk extent
<u>dccat</u>	Filename of the system dictionary catalog (DDLDCAT) area
<u>idms.system.dccat</u>	ID of the system dictionary catalog (DDLDCAT) area
<u>dccatl</u>	Filename of the system dictionary catalog load (DDLDCATLOD) area
<u>idms.system.dccatlod</u>	ID of the system dictionary catalog load (DDLDCATLOD) area
<u>dccatx</u>	Name of the system dictionary catalog index (DDLDCATX) area
<u>idms.system.dccatx</u>	ID of the system dictionary catalog index (DDLDCATX) area
<u>dcdml</u>	Name of the system dictionary definition (DDLDCML) area
<u>idms.system.ddldml</u>	ID of the system dictionary definition (DDLDCML) area
<u>dclod</u>	Name of the system dictionary definition load (DDLDCLOD) area
<u>idms.system.ddldclod</u>	ID of the system dictionary definition load (DDLDCLOD) area
<u>dclog</u>	Name of the system log area (DDLDCLOG) area
<u>idms.system.ddldclog</u>	ID of the system log (DDLDCLOG) area
<u>dcrun</u>	Name of the system queue (DDLDCRUN) area
<u>idms.system.ddldcrun</u>	ID of the system queue (DDLDCRUN) area
<u>dcscr</u>	Name of the system scratch (DDLDCSCR) area
<u>idms.system.ddldcscr</u>	ID of the system scratch (DDLDCSCR) area
<u>dcmsg</u>	Name of the system message (DDLDCMSG) area
<u>idms.sysmsg.ddldcmsg</u>	ID of the system message (DDLDCMSG) area
<u>dclscr</u>	Name of the local mode system scratch (DDLDCSCR) area
<u>idms.sysloc.ddlocscr</u>	ID of the local mode system scratch (DDLDCSCR) area
<u>dirldb</u>	Name of the IDMSDIRL definition (DDLDCML) area
<u>idms.sysdirl.ddldml</u>	ID of the IDMSDIRL definition (DDLDCML) area

<u>dirllod</u>	Name of the IDMSDIRL definition load (DDLDCLOG) area
<u>idms.sysdirl.dirllod</u>	ID of the IDMSDIRL definition load (DDLDCLOG) area
<u>empdemo</u>	Name of the EMPDEMO area
<u>idms.empdemo1</u>	ID of the EMPDEMO area
<u>insdemo</u>	Name of the INSDEMO area
<u>idms.insdemo1</u>	ID of the INSDEMO area
<u>orgdemo</u>	Name of the ORGDEMO area
<u>idms.orgdemo1</u>	ID of the ORGDEMO area
<u>empldem</u>	Name of the EMPLDEMO area
<u>idms.sqldemo.empldemo</u>	ID of the EMPLDEMO area
<u>infodem</u>	Name of the INFODEMO area
<u>idms.sqldemo.infodem</u>	ID of the INFODEMO area
<u>projdem</u>	Name of the PROJDEMO area
<u>idms.projseg.projdemo</u>	ID of the PROJDEMO area
<u>indxdem</u>	Name of the INDXDEMO area
<u>idms.sqldemo.indxdemo</u>	ID of the INDXDEMO area
<u>sysctl</u>	Name of the SYSCTL file
<u>idms.sysctl</u>	ID of the SYSCTL file
<u>secdd</u>	Name of the system user catalog (DDLSEC) area
<u>idms.sysuser.ddlsec</u>	ID of the system user catalog (DDLSEC) area
<u>dictdb</u>	Name of the application dictionary definition area
<u>idms.appldict.ddldml</u>	ID of the application dictionary definition (DDLML) area
<u>dloddb</u>	Name of the application dictionary definition load area
<u>idms.appldict.ddldclod</u>	ID of the application dictionary definition load (DDLDCLOG) area
<u>sqldd</u>	Name of the SQL catalog (DDL CAT) area
<u>idms.syssql.ddlcat</u>	ID of the SQL catalog (DDL CAT) area
<u>sqllod</u>	Name of the SQL catalog load (DDL CATL) area
<u>idms.syssql.ddlcatl</u>	ID of SQL catalog load (DDL CATL) area
<u>sqlxdd</u>	Name of the SQL catalog index (DDL CATX) area

<u>idms.syssql.ddlcatx</u>	ID of the SQL catalog index (DDL CATX) area
<u>asfdml</u>	Name of the asf dictionary definition (DDL DML) area
<u>idms.asfdict.ddldml</u>	ID of the asf dictionary definition (DDL DML) area
<u>asflod</u>	Name of the asf dictionary definition load (ASFLOD) area
<u>idms.asfdict.asflod</u>	ID of the asf dictionary definition load (ASFLOD) area
<u>asfdata</u>	Name of the asf data (ASF DATA) area
<u>idms.asfdict.asfdata</u>	ID of the asf data area (ASF DATA) area
<u>ASFDEFN</u>	Name of the asf data definition (ASFDEFN) area
<u>idms.asfdict.asfdefn</u>	ID of the asf data definition area (ASFDEFN) area
<u>j1jrn1</u>	Name of the first disk journal file
<u>idms.j1jrn1</u>	ID of the first disk journal file
<u>j2jrn1</u>	Name of the second disk journal file
<u>idms.j2jrn1</u>	ID of the second disk journal file
<u>j3jrn1</u>	Name of the third disk journal file
<u>idms.j3jrn1</u>	ID of the third disk journal file
<u>SYSIDMS</u>	Name of the SYSIDMS parameter file

2.2.3 Archiving — VM/ESA

IDMSBCF (ARCHIVE LOG STATEMENT) (VM/ESA)

```
*****
*
*          ARCHIVE LOG STATEMENT ENTERED USING IDMSBCF          *
*          (creates the input file for running reports)          *
*****
EXEC IDMSFD
OSRUN IDMSBCF
```

►► For information about IDMSBCF (the batch command facility), refer to *CA-IDMS Command Facility*.

<u>IDMSFD</u>	Exec which defines all FILEDEFS, TXTLIBs, and LOADLIBs required by the system
---------------	---

Runtime parameters: IDMSFD references the SYSIDMS file, a file in which you can specify parameters that describe physical requirements (such as DMCL or dictionary to access), runtime parameters, or operating system-specific file information. For this job stream, you should specify the DICTNAME parameter.

►► For information on all SYSIDMS parameters, refer to *CA-IDMS Database Administration*.

Executing in local mode: For the ARCHIVE LOG statement, you must specify that IDMSBCF is executing in local mode. To specify this, do one of the following:

- Link IDMSBCF with an IDMSOPTI program that specifies local execution mode
- Modify the OSRUN statement, as follows:

```
OSRUN IDMSBCF PARM='*LOCAL*'
```

Note: This option is valid only if you issue the OSRUN command from a System Product interpreter or an EXEC2 file.

Creating the SYSIPT file: To create the SYSIPT file, enter these VM/ESA commands:

```
XEDIT sysipt data a (NOPROF
INPUT
.
.
.
Source statements
.
.
.
FILE
```

2.2.4 Archiving — BS2000/OSD

IDMSBCF (ARCHIVE LOG STATEMENT) (BS2000/OSD)

```
*****
*
*          ARCHIVE LOG STATEMENT ENTERED USING IDMSBCF          *
*          (creates the input file for running reports)          *
*****
/ADD-FILE-LINK L-NAME=CDMSLIB,F-NAME=idms.dba.loadlib
/ADD-FILE-LINK L-NAME=CDMSLIB1,F-NAME=idms.loadlib
/ADD-FILE-LINK L-NAME=CDMSLODR,F-NAME=idms.loadlib
/ADD-FILE-LINK L-NAME=sysctl,F-NAME=idms.sysctl,SHARED-UPD=*YES
/ADD-FILE-LINK L-NAME=SYSIDMS,F-NAME=idms.sysidms
/ADD-FILE-LINK L-NAME=dclog,F-NAME=idms.system.ddldclog,SHARED-UPD=*YES
/ADD-FILE-LINK L-NAME=sysmsg,F-NAME=idms.sysmsg.ddldcmsg,SHARED-UPD=*YES
/ADD-FILE-LINK L-NAME=SYS001,F-NAME=*DUMMY
/ADD-FILE-LINK L-NAME=SYS002,F-NAME=idms.archive
/ADD-FILE-LINK L-NAME=j1jrn1,F-NAME=*DUMMY
/ADD-FILE-LINK L-NAME=j2jrn1,F-NAME=*DUMMY
/ADD-FILE-LINK L-NAME=j3jrn1,F-NAME=*DUMMY
/ADD-FILE-LINK L-NAME=j4jrn1,F-NAME=*DUMMY
/ADD-FILE-LINK L-NAME=sysjrn1,F-NAME=*DUMMY
/ASSIGN-SYSDTA TO=*SYSCMD
/START-PROG *MOD(ELEM=IDMSBCF,LIB=idms.loadlib,RUN-MODE=*ADV)
  ARCHIVE LOG;
```

►► For information about IDMSBCF (the batch command facility), refer to *CA-IDMS Command Facility*.

2.2 Archiving statistics from the DDLDCLOG area

<u>idms.dba.loadlib</u>	Load library containing DMCL and database name table load modules
<u>idms.loadlib</u>	Filename of the load library containing CA-IDMS modules
<u>idms.sysidms</u>	Filename of the SYSIDMS parameter file; in this file you can specify parameters for physical requirements (like DMCL or dictionary), runtime parameters, or operating system-specific file information ▶▶ For information on SYSIDMS parameters, refer to <i>CA-IDMS Database Administration</i> .
<u>idms.archive</u>	Filename of disk log archive file
<u>dclog</u>	Linkname of the file containing the DDLDCLOG area
<u>idms.system.ddlclg</u>	Dataset name of the file containing the DDLDCLOG area
<u>sysmsg</u>	Linkname of the file containing the DDLDCMSG area
<u>idms.sysmsg.ddlclg</u>	Dataset name of the file containing the DDLDCMSG area
<u>j1jrn1, j2jrn1, j3jrn1, j4jrn1</u>	Linknames of the disk journal files
<u>sysjrn1</u>	Linkname of the tape journal file

2.3 Using SMF to archive statistics (OS/390 only)

Under OS/390, statistics are written to the OS/390 SMF job accounting file as follows:

- Application Monitor — If AMSMF=YES is specified in the #PMOPT macro
- Interval Monitor — If IMSMF=YES is specified in the #PMOPT macro

Using PMSMFEX to archive: To archive the statistics from the OS/390 SMF file, use the PMSMFEX module which is supplied with Performance Monitor and stored in the dictionary. Sample central version and local mode JCL follow.

SMF archive using PMSMFEX macro ('Central version')

```

//*****
//*
//*          SMF ARCHIVE
//*
//*    READS THE SMF FILE AND CREATES THE
//*    INPUT FILE FOR RUNNING REPORTS
//*
//*****
//CULPRIT EXEC PGM=CULPRIT,REGION=1024K
//STEPLIB DD DSN=idms.dba.loadlib,DISP=SHR
//          DD DSN=idms.loadlib,DISP=SHR
//SORTLIB DD DSN=sys1.sortlib,DISP=SHR
//SYSOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SORTPRNT DD SYSOUT=A
//SORTMSG DD SYSOUT=A
//SYS004 DD SYSOUT=A,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133)
//SYS005 DD DSN=&&UPRMWORK,DISP=(NEW,DELETE),
//          UNIT=disk,SPACE=(CYL,(5,2)),
//          DCB=(RECFM=FB,LRECL=320,BLKSIZE=1600)
//SYS006 DD DSN=&&UEXTWORK,DISP=(NEW,DELETE),
//          UNIT=disk,SPACE=(CYL,(5,2)),
//          DCB=(RECFM=VB,LRECL=2044,BLKSIZE=4628)
//SYS007 DD DSN=&&SRTPWORK,DISP=(NEW,DELETE),
//          UNIT=disk,SPACE=(TRK,(1,1)),
//          DCB=(RECFM=F,LRECL=80,BLKSIZE=80)
//SYS008 DD DSN=&&NSRTWORK,DISP=(NEW,DELETE),
//          UNIT=disk,SPACE=(CYL,(5,2)),
//          DCB=(RECFM=VB,LRECL=512,BLKSIZE=4628)
//SORTWK01 DD DSN=&&WRKAWORK,
//            UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK02 DD DSN=&&WRKBWORK,
//            UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK03 DD DSN=&&WRKCWORK,
//            UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK04 DD DSN=&&WRKDWORK,
//            UNIT=disk,SPACE=(CYL,(5,2))
//CULSRT1I DD DSN=idms.src1ib(SORT1),DISP=SHR
//SYSIN4 DD DUMMY,DCB=BLKSIZE=80
//VSAMCTRL DD DUMMY
//CULLIB DD DSN=idms.src1ib,DISP=SHR
//sysctl DD DSN=idms.sysctl,DISP=SHR
//dcmsg DD DSN=idms.sysmsg.dd1dcmsg,DISP=SHR
//SYS010 DD DSN=user.smf.file,DISP=SHR
//SYS011 DD DUMMY
//SYS020 DD DSN=user.pmsmfex.outfile,DISP=(NEW,CATLG,DELETE),
//          UNIT=disk,SPACE=(CYL,(5,2)),
//          DCB=(RECFM=VB,LRECL=280,BLKSIZE=23244)
//SYSIDMS DD *
DMCL=dmc1-name
Other SYSIDMS parameters, as appropriate
/*
//SYSIN DD *
DATABASE DICTNAME=sysdir1
=MACRO 'PMSMFEX' (nnn)
=MEND
/*
//*

```

<u>idms.dba.loadlib</u>	Name of the load library containing the DMCL and the database name table load modules
<u>idms.loadlib</u>	Name of the load library containing the CA-IDMS executable modules
<u>idms.srclib</u>	CA-IDMS source library
<u>sysctl</u>	Ddname of the SYSCTL file
<u>idms.sysctl</u>	Dataset name of the SYSCTL file
<u>dcmsg</u>	Ddname of the dictionary message area
<u>idms.sysmsg.ddldcmsg</u>	Dataset name of the dictionary message area (DDLDCMSG)
<u>sys1.sortlib</u>	System sort library
<u>disk</u>	Symbolic device name of the file
<u>user.smf.file</u>	OS/390 SMF job accounting file
<u>user.pmsmfex.outfile</u>	Name of the file created by the extract
<u>dmcl-name</u>	Name of the DMCL to access at runtime <p>►► For information on other SYSIDMS parameters, refer to <i>CA-IDMS Database Administration</i>.</p>
<u>dictionary-name</u>	Name of the dictionary to access (probably SYSDIRL)
<u>nnn</u>	SMF user record type coded on the #PMOPT macro SMFRCID parameter; the default is 230

Note: If the input SMF file to the SMF extract was created as a variable blocked spanned (VBS) file (RECFM=VBS), you must include the parameter DCB=BFTEK=A in the SYS010 DD statement for the *user.smf.file* dataset. Alternatively, add BFTEK=A to existing data control block (DCB) parameters.

If the CA-CULPRIT dictionary security option is turned on in the dictionary that contains the SMF extract report source, a PROFILE statement naming an authorized user and password is required.

SMF archive using PMSMFEX macro ('Local mode')

```

//CULPRIT EXEC PGM=CULPRIT,REGION=1024K
//STEPLIB DD DSN=idms.dba.loadlib,DISP=SHR
// DD DSN=idms.loadlib,DISP=SHR
//SORTLIB DD DSN=sysl.sortlib,DISP=SHR
//SYSOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SORTPRNT DD SYSOUT=A
//SORTMSG DD SYSOUT=A
//SYS004 DD SYSOUT=A,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133)
//SYS005 DD DSN=&&UPRMWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(CYL,(5,2)),
// DCB=(RECFM=FB,LRECL=320,BLKSIZE=1600)
//SYS006 DD DSN=&&UEXTWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(CYL,(5,2)),
// DCB=(RECFM=VB,LRECL=2044,BLKSIZE=4628)
//SYS007 DD DSN=&&SRTPWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(TRK,(1,1)),
// DCB=(RECFM=F,LRECL=80,BLKSIZE=80)
//SYS008 DD DSN=&&NSRTWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(CYL,(5,2)),
// DCB=(RECFM=VB,LRECL=512,BLKSIZE=4628)
//SORTWK01 DD DSN=&&WRKAWORK,
// UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK02 DD DSN=&&WRKBWORK,
// UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK03 DD DSN=&&WRKCWORK,
// UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK04 DD DSN=&&WRKDWORk,
// UNIT=disk,SPACE=(CYL,(5,2))
//CULSRT1I DD DSN=idms.srclib(SORT1),DISP=SHR
//SYSIN4 DD DUMMY,DCB=BLKSIZE=80
//VSAMCTRL DD DUMMY
//CULLIB DD DSN=idms.srclib,DISP=SHR
//dirldb DD DSN=idms.sysdir1.ddldml,DISP=SHR
//dcmsg DD DSN=idms.sysmsg.ddldcmsg,DISP=SHR
//sysjrn1 DD DUMMY
//SYS010 DD DSN=user.smf.file,DISP=SHR
//SYS011 DD DUMMY
//SYS020 DD DSN=user.pmsmfex.outfile,DISP=(NEW,CATLG,DELETE)
// UNIT=disk,SPACE=(CYL,(5,2)),
// DCB=(RECFM=VB,LRECL=280,BLKSIZE=23244)
//SYSIDMS DD *
DMCL=dmc1-name
Other SYSIDMS parameters, as appropriate
/*
//SYSIN DD *
DATABASE DICTNAME=sysdir1
=MACRO 'PMSMFEX' (nnn)
=MEND
/*
//*

```

For descriptions of variables, see the preceding JCL for executing under the central version.

Using PMSMFEX to extract data for a specific CV or system: To use PMSMFEX to extract data for a specific central version or DC system, you must modify the source statements for the PMSMFEX module stored in the dictionary.

- Extracting Interval Monitor data — To extract data for the Interval monitor by central version number or DC system number, change the source statements for PMSMFEX as follows:

```

00$ INTERVAL MONITOR RECORD SELECTION
00$ UNCOMMENT AND CHANGE FOLLOWING CARDS TO SELECT BY SYSTEM
00$ VERSION. SPECIFY THE SYSTEM NUMBER(S) DESIRED IN HEX.
00$ EX: 007135 IF SMFHDCV# EQ X'0010' 150
00$ 007139 DROP $ DON'T WANT THIS ONE
00$ WILL SELECT ONLY RECORDS FOR DC SYSTEM VERSION # 16
00$
00$135 IF SMFHDCV# EQ X'NNNN' 150 $ WANT THIS
00$136 IF SMFHDCV# EQ X'NNNN' 150 $ WANT THIS
00$137 IF SMFHDCV# EQ X'NNNN' 150 $ WANT THIS
00$138 IF SMFHDCV# EQ X'NNNN' 150 $ WANT THIS
00$139 DROP $ NOT THIS
00$-----
00$ UNCOMMENT AND CHANGE FOLLOWING CARDS TO SELECT BY CV
00$ VERSION. SPECIFY THE CV NUMBER(S) DESIRED IN HEX.
00$ EX: 007135 IF SMFHCV# EQ X'10' 150
00$ 007139 DROP $ DON'T WANT THIS ONE
00$ WILL SELECT ONLY RECORDS FOR DC VERSION # 16
00$
00$135 IF SMFHCV# EQ X'NN' 150 $ WANT THIS
00$136 IF SMFHCV# EQ X'NN' 150 $ WANT THIS
00$137 IF SMFHCV# EQ X'NN' 150 $ WANT THIS
00$138 IF SMFHCV# EQ X'NN' 150 $ WANT THIS
00$139 DROP $ NOT THIS

```

- Extracting Application Monitor data — To extract data for the Application monitor by central version number or DC system version number, change the source statements for PMSMFEX as follows:

```

00$ APPLICATION MONITOR RECORD SELECTION
00$ UNCOMMENT AND CHANGE FOLLOWING CARDS TO SELECT BY SYSTEM
00$ VERSION. SPECIFY THE SYSTEM NUMBER(S) DESIRED IN HEX.
00$ EX: 007235 IF SMFHDCV# EQ X'0010' 240
00$ 007239 DROP $ DON'T WANT THIS ONE
00$ WILL SELECT ONLY RECORDS FOR DC SYSTEM VERSION # 16
00$
00$235 IF SMFHDCV# EQ X'NNNN' 240 $ WANT THIS
00$236 IF SMFHDCV# EQ X'NNNN' 240 $ WANT THIS
00$237 IF SMFHDCV# EQ X'NNNN' 240 $ WANT THIS
00$238 IF SMFHDCV# EQ X'NNNN' 240 $ WANT THIS
00$239 DROP $ NOT THIS
00$-----
00$ UNCOMMENT AND CHANGE FOLLOWING CARDS TO SELECT BY CV
00$ VERSION. SPECIFY THE CV NUMBER(S) DESIRED IN HEX.
00$ EX: 007235 IF SMFHCV# EQ X'10' 240
00$ 007239 DROP $ DON'T WANT THIS ONE
00$ WILL SELECT ONLY RECORDS FOR DC VERSION # 16
00$
00$235 IF SMFHCV# EQ X'NN' 240 $ WANT THIS
00$236 IF SMFHCV# EQ X'NN' 240 $ WANT THIS
00$237 IF SMFHCV# EQ X'NN' 240 $ WANT THIS
00$238 IF SMFHCV# EQ X'NN' 240 $ WANT THIS
00$239 DROP $ NOT THIS

```

2.4 Sample job streams for running reports

This section provides sample job streams for running reports under:

- OS/390
- VSE/ESA
- VM/ESA
- BS2000/OSD

2.4.1 Running reports — OS/390

CULPRIT for running Performance Monitor reports (OS/390)

```
//*****
//*
//*          Performance Monitor REPORTS          *
//*
//* THE JOB EXECUTES THE CULPRIT REPORTS USING THE ARCHIVE *
//* FILES AS INPUT AND PRODUCES THE REPORTS AND/OR A *
//* MACHINE-READABLE FILE AS OUTPUT. THE USER HAS THE *
//* RESPONSIBILITY OF DEFINING THE FOLLOWING OPTIONS: *
//*
//* 1. REPORTS SELECTION - //SYSIN DD *          *
//*   EACH REPORT REQUESTED IS SPECIFIED BY AN *
//*   = COPY PARAMETER INSERTED IMMEDIATELY *
//*   AFTER THE SYSIN DD * STATEMENT: *
//*       APPLICATION MONITOR .. PMARPTnn *
//*       INTERVAL MONITOR ..... PMIRPTnn *
//*
//* 2. SELECTION CRITERIA - //SYS010 DD          *
//*   SELECTION CRITERIA ARE SPECIFIED BY THE SELECTION *
//*   CRITERIA PARAMETER CARDS INSERTED IMMEDIATELY *
//*   AFTER THE SYS010 DD * STATEMENT. TO SPECIFY NO *
//*   SELECTION CRITERIA, INCLUDE THE FOLLOWING: *
//*       //SYS010 DD DUMMY *
//*
//* 3. ARCHIVE INPUT SET DEFINITION - //SYS011 DD DSN= *
//*   DEFINE THE ARCHIVE FILES BY CODING THE FOLLOWING: *
//*       //SYS011 DD DSN=idms.archive,DISP=OLD *
//*       //          DD DSN=idms.archiven,DISP=OLD *
//*       //          UNIT=AFF=SYS011 *
//*
//* 4. MACHINE-READABLE OUTPUT SET (PMARPT90) *
//*   DEFINITION - //SYS020 DD DSN= *
//*   TO PRODUCE MACHINE-READABLE OUTPUT, THE OUTPUT *
//*   FILE MUST BE DEFINED AS FOLLOWS: *
//*       //SYS020 DD DSN=rpt90.output.datASET *
//*
//*****
//CULPRIT EXEC PGM=CULPRIT,REGION=1024K
```

```

//STEPLIB DD DSN=idms.dba.loadlib,DISP=SHR
// DD DSN=idms.loadlib,DISP=SHR
//SORTLIB DD DSN=sysl.sortlib,DISP=SHR
//SYSOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SORTPRNT DD SYSOUT=A
//SORTMSG DD SYSOUT=A
//SYS004 DD SYSOUT=A,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133)
//SYS005 DD DSN=&&UPRMWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(CYL,(5,2)),
// DCB=(RECFM=FB,LRECL=320,BLKSIZE=1600)
//SYS006 DD DSN=&&UEXTWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(CYL,(5,2)),
// DCB=(RECFM=VB,LRECL=2044,BLKSIZE=4628)
//SYS007 DD DSN=&&SRTPWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(TRK,(1,1)),
// DCB=(RECFM=F,LRECL=80,BLKSIZE=80)
//SYS008 DD DSN=&&NSRTWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(CYL,(5,2)),
// DCB=(RECFM=VB,LRECL=512,BLKSIZE=4628)
//SORTWK01 DD DSN=&&WRKAWORK,
// UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK02 DD DSN=&&WRKBWORK,
// UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK03 DD DSN=&&WRKCWORK,
// UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK04 DD DSN=&&WRKDWORK,
// UNIT=disk,SPACE=(CYL,(5,2))
//CULSRT1I DD DSN=idms.srclib(SORT1),DISP=SHR
//SYSIN4 DD DUMMY,DCB=BLKSIZE=80
//VSAMCTRL DD DUMMY
//CULLIB DD DSN=idms.srclib,DISP=SHR
//sysctl DD DSN=idms.sysctl,DISP=SHR
//dcmsg DD DSN=idms.sysmsg.ddldcmsg,DISP=SHR
//SYS010 DD *
REPORT FROM 09:00 ON 5/15/95
/*
//SYS011 DD DSN=idms.archive,DISP=OLD,UNIT=tape
/*SYS020 DD DSN=rpt90.output.dataset,DISP=(NEW,CATLG,DELETE),
/* UNIT=disk,SPACE=(CYL,(1,1)),
/* DCB=(RECFM=VB,LRECL=280,BLKSIZE=23244)
//SYS020 DD DUMMY
//SYSIDMS DD *
DMCL=dmc1-name
Other SYSIDMS parameters, as appropriate
/*
//SYSIN DD *
DATABASE DICTNAME=sysdir1
PARAM=NOLIST
=COPY 'PMIRPT00'
=COPY 'PMNAME'
=COPY 'PMIRPT01'
.

```

2.4 Sample job streams for running reports

```
.
.
=COPY 'PMIRPT99'
/*
/**
```

<u>idms.dba.loadlib</u>	Name of the load library containing the DMCL and database name table load modules
<u>idms.loadlib</u>	Name of the load library containing CA-IDMS executable modules
<u>idms.srclib</u>	CA-IDMS source library
<u>sysctl</u>	The ddname of the SYSCTL file
<u>idms.sysctl</u>	Dataset name of the SYSCTL file
<u>dcmsg</u>	Ddname of the dictionary message area (DDLDCMSG)
<u>idms.sysmsg.ddldcmsg</u>	Filename of the dictionary message area (DDLDCMSG)
<u>sysl.sortlib</u>	System sort library
<u>idms.archive</u> <u>idms.archiven</u>	Names of archive logs (n is <i>nth</i> log)
<u>rpt90.output.dataset</u>	Machine-readable output
<u>dmcl-name</u>	Name of the DMCL ▶▶ For information on other SYSIDMS parameters, refer to <i>CA-IDMS Database Administration</i> .
<u>dictionary-name</u>	Dictionary name (probably SYSDIRL)

OS/390 blocksize considerations: The input JCL for the statistics input file (SYS011) must specify a DCB=BLKSIZE=*nnnnn* parameter. *Nnnnn* must be at least 280 bytes larger than the actual block size of the file. If the DCB specified is not large enough, CA-CULPRIT may receive an 0C4 abend.

For example, if the input file has a blocksize of 11476, an appropriate SYS011 DD statement is:

```
//SYS011 DD DSN=PM.STATS,DISP=OLD,DCB=BLKSIZE=12000
```

Executing in local mode:**CULPRIT for running Performance Monitor reports (OS/390)**

```

//CULPRIT EXEC PGM=CULPRIT,REGION=1024K
//STEPLIB DD DSN=idms.dba.loadlib,DISP=SHR
// DD DSN=idms.loadlib,DISP=SHR
//SORTLIB DD DSN=sys1.sortlib,DISP=SHR
//SYSOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SORTPRNT DD SYSOUT=A
//SORTMSG DD SYSOUT=A
//SYS004 DD SYSOUT=A,DCB=(RECFM=FBA,LRECL=133,BLKSIZE=133)
//SYS005 DD DSN=&&UPRWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(CYL,(5,2)),
// DCB=(RECFM=FB,LRECL=320,BLKSIZE=1600)
//SYS006 DD DSN=&&UXTWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(CYL,(5,2)),
// DCB=(RECFM=VB,LRECL=2044,BLKSIZE=4628)
//SYS007 DD DSN=&&SRTPWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(TRK,(1,1)),
// DCB=(RECFM=F,LRECL=80,BLKSIZE=80)
//SYS008 DD DSN=&&NSRTWORK,DISP=(NEW,DELETE),
// UNIT=disk,SPACE=(CYL,(5,2)),
// DCB=(RECFM=VB,LRECL=512,BLKSIZE=4628)
//SORTWK01 DD DSN=&&WRKAWORK,
// UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK02 DD DSN=&&WRKBWORK,
// UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK03 DD DSN=&&WRKCWORK,
// UNIT=disk,SPACE=(CYL,(5,2))
//SORTWK04 DD DSN=&&WRKDWK,
// UNIT=disk,SPACE=(CYL,(5,2))
//CULSRT1I DD DSN=idms.src1ib(SORT1),DISP=SHR
//SYSIN4 DD DUMMY,DCB=BLKSIZE=80
//VSAMCTRL DD DUMMY
//CULLIB DD DSN=idms.src1ib,DISP=SHR
//dirldb DD DSN=idms.sysdir1.ddldml,DISP=SHR
//dcmsg DD DSN=idms.sysmsg.ddldcmsg,DISP=SHR
//sysjrn1 DD DUMMY
//SYS010 DD *
REPORT FROM 09:00 ON 5/15/95
/*
//SYS011 DD DSN=idms.archive1,DISP=OLD,UNIT=tape
/*SYS020 DD DSN=rpt90.output.dataset,DISP=(NEW,CATLG,DELETE),
/* UNIT=disk,SPACE=(CYL,(1,1)),
/* DCB=(RECFM=VB,LRECL=280,BLKSIZE=23244)
//SYS020 DD DUMMY
//SYSIDMS DD *
DMCL=dmc1-name
Other SYSIDMS parameters, as appropriate
/*
//SYSIN DD *
DATABASE DICTNAME=sysdir1

```

```

PARAM=NOLIST
=COPY 'PMIRPT00'
=COPY 'PMNAME'
=COPY 'PMIRPT01'
.
.
.
=COPY 'PMIRPT99'
/*
//*
```

For descriptions of variables, see the preceding JCL for running under the central version.

2.4.2 Running reports — VSE/ESA

CULPRIT for running Performance Monitor reports (VSE/ESA)

```

*****
*
*                               *
*           Performance Monitor REPORTS           *
*
*           THIS JOB READS THE FILE CREATED IN THE PREVIOUS *
*           STEP AND PRODUCES THE CULPRIT REPORTS.         *
*
*****
// EXEC   PROC=IDMSLBLS
// DLBL   SORTWK1,'SORTWK1',0,SD
// EXTENT SYSnnn,vvvvvv,1,0,ssss,nnnn
// ASSGN  SYS011,TAPE
// TLBL   SYS011,'ARCHIVE,PRINTLOG'
// ASSGN  SYS020,TAPE
// TLBL   SYS020,'OUTPUT.TAPE'
// DLBL   SYS005,'SCRATCH1',0
// EXTENT SYS005,vvvvvv,,ssss,nnnn
// ASSGN  SYS005,DISK,VOL=vvvvvv,SHR
// DLBL   SYS006,'SCRATCH2',0
// EXTENT SYS006,vvvvvv,,ssss,nnnn
// ASSGN  SYS006,DISK,VOL=vvvvvv,SHR
// DLBL   SYS007,'SCRATCH3',0
// EXTENT SYS007,vvvvvv,,ssss,nnnn
// ASSGN  SYS007,DISK,VOL=vvvvvv,SHR
// DLBL   SYS008,'SCRATCH4',0
// EXTENT SYS008,vvvvvv,,ssss,nnnn
// ASSGN  SYS008,DISK,VOL=vvvvvv,SHR
// ASSGN  SYS004,SYSLST
// ASSGN  SYS010,SYSIPT
// UPSI 1
// EXEC CULPRIT,SIZE=400K
PARAM=NOLIST
=COPY 'PMIRPT00'
=COPY 'PMNAME'
=COPY 'PMIRPT01'
=COPY 'PMIRPT02'
```

```

.
.
.
=COPY 'PMIRPT99'
/*
REPORT FROM 09:00 ON 5/15/95
/*
/&

```

<u>nnnn</u>	Number of tracks (CKD) or blocks (FBA) in disk extent
<u>SSSS</u>	Starting track (CKD) or block (FBA) of disk extent
<u>VVVVVV</u>	Volume serial number

IDMSLBS procedure: The IDMSLBS procedure (provided at installation) contains the file definitions for CA-IDMS dictionaries and databases (for more information on IDMSLBS, see 2.2.2, “Archiving — VSE/ESA” on page 2-6).

IDMSLBS references the SYSIDMS parameters file. In SYSIDMS, you can specify physical requirements (such as DMCL or dictionary), runtime parameters, and operating system-dependent file information.

►► For information on SYSIDMS parameters, refer to *CA-IDMS Database Administration*.

2.4.3 Running reports — VM/ESA

CULPRIT for running Performance Monitor reports (VM/ESA)

```

FILEDEF SYSIN DISK sysin data a (LRECL 80 BLKSIZE 80 RECFM F
EXEC CULPFD
OSRUN CULPRIT

```

<u>sysin data a</u>	Filename, type, and mode of the file containing CA-CULPRIT statements
<u>CULPFD</u>	Exec which defines all file definitions required by the system

Runtime parameters: CULPFD references the SYSIDMS parameters file. In this file you can specify physical requirements (like DMCL or dictionary), runtime parameters, and operating system-dependent file information.

►► For information on SYSIDMS parameters, refer to *CA-IDMS Database Administration*.

Executing in local mode: To specify that CA-CULPRIT is executing in local mode, do one of the following:

- Link CA-CULPRIT with an IDMSOPTI program that specifies local execution mode
- Specify *LOCAL* as the first input parameter of the *sysin data a* file identified in the FILEDEF SYSIN statement
- Modify the OSRUN statement:
OSRUN CULPRIT PARM='*LOCAL*'

Note: This option is available only if the OSRUN command is issued from a System Product interpreter or an EXEC2 file.

To create the SYSIN file, enter these VM/ESA commands:

```
XEDIT sysin data a (NOPROF
INPUT
  database cvmach=TS10
  PARAM=LIST
=COPY 'PMIRPT00'
=COPY 'PMNAME'
=COPY 'PMIRPT01'
=COPY 'PMIRPT02'
.
.
=COPY 'PMIRPT99'
FILE
```

2.4.4 Running reports — BS2000/OSD

CULPRIT for running Performance Monitor reports (BS2000/OSD)

```
/MOD-JOB-SWITCH ON=(4,5)
/EDT
@SETSW OFF=4,5
@NOTE create SYS010 file: in this example, the data used
@NOTE will be from May 15, 1995, starting at 9:00 to the
@NOTE end of the input tape
  REPORT FROM 09:00 ON 5/15/95
@WRITE 'select.file' OVERWRITE
@DELETE
@NOTE create input.file
DATABASE DICTNAME=dictionary-name
PARAM=NOLIST
=COPY 'PMIPRT00'
=COPY 'PMNAME'
=COPY 'PMIPRT01'
.
.
=COPY 'PMIPRT99'
@WRITE 'input.file' OVERWRITE
/ADD-FILE-LINK L-NAME=SYS010,F-NAME=select.file
/ADD-FILE-LINK L-NAME=SYS011,F-NAME=idms.archive
/CALL-PROCEDURE (LIB=idms.dba.srclib,ELEM=CULPRIT),PROC-PAR=(INPF='input.file')
```

<u>select.file</u>	Filename of the file containing the selection criteria parameters
<u>idms.archive</u>	Filename of the disk log archive file
<u>input.file</u>	CA-CULPRIT input parameters
<u>idms.dba.srclib</u>	Filename of the CA-IDMS dba source library

2.5 Replacing the COPY parameters (VSE/ESA only)

CA-CULPRIT cannot create variable-length records in a VSE/ESA environment. Therefore, make the changes described in this section to compensate for fixed-length records.

Changing PMARPT90 and PMIRPT90: Replace the COPY parameters in your job stream with USE and CHANGE statements, as follows:

- For PMARPT90:

```
USE 'PMARPT00'  
USE 'PMNAME'  
USE 'PMARPT90'  
CHANGE ' 900UT 280 D PS ' TO ' 900UT 280 8120 D PS '  
USE 'PMARPT99' optional
```

- For PMIRPT90:

```
USE 'PMIRPT00'  
USE 'PMNAME'  
USE 'PMIRPT90'  
CHANGE ' 900UT 280 D PS ' TO ' 900UT 280 8120 D PS '  
USE 'PMIRPT99' optional
```

Changing PMARPT00 and PMIRPT00: Replace the COPY parameters in your job stream with USE and CHANGE statements, as follows:

- For PMARPT00:

```
USE 'PMARPT00'  
CHANGE ' IN 280 V 6000 ' TO ' IN 280 F 8120 '  
USE 'PMNAME'  
USE 'PMARPTXX' specify the required report(s)  
USE 'PMARPT99' optional
```

- For PMIRPT00:

```
USE 'PMIRPT00'  
CHANGE ' IN 280 V 6000 ' TO ' IN 280 F 8120 '  
USE 'PMNAME'  
USE 'PMIRPTXX' specify the required report(s)  
USE 'PMIRPT99' optional
```

2.6 Replacing the COPY parameters for tape input (VSE/ESA only)

Archive log tapes created under VSE/ESA have a blocksize of 32760, unless file overrides are specified in the SYSIDMS parameters. Therefore, make the changes described in this section to run Performance Monitor reports with tape input. If SYSIDMS file overrides have been used, substitute that blocksize for 32760.

Changing PMARPT00: Replace the COPY parameters in your job stream with USE and CHANGE statements, as follows:

```
USE 'PMARPT00'  
CHANGE ' IN 280 V 6000 ' TO ' IN 280 V 32760 '  
USE 'PMNAME'  
USE 'PMARPTXX' specify the required report(s)
```

Changing PMIRPT00: Replace the COPY parameters in your job stream with USE and CHANGE statements, as follows:

```
USE 'PMIRPT00'  
CHANGE ' IN 280 V 6000 ' TO ' IN 280 V 32760 '  
USE 'PMNAME'  
USE 'PMIRPTXX' specify the required report(s)
```

2.7 Note for DDR-only shops

DDR-only shops must use the *CULPRIT USE* statement to request the following reports:

- PMIRPT00
- PMARPT00

Instead of using the =COPY statement, as demonstrated by the examples earlier in this section, use the following:

PMIRPT00

```

                                PMCULLID for VSE/ESA
                                ↓
USE 'PMIRPT00'
CHANGE 'IN 80'                    TO 'IN 363 V 367 UM(PMCULLIM) $'
CHANGE 'REC FILE1-EOF'           TO 'REC FILE1-EOF 283 1 2 $'
CHANGE 'CARD-REC 1'              TO 'CARD-REC 284'
CHANGE 'CARD-GRP 1'              TO 'CARD-GRP 284'
CHANGE 'IN 280'                  TO '00$'
CHANGE 'IN 285 F 285 PS MB=DUMMY' TO 'IN 285 F 285 MB=DUMMY'
CHANGE 'IN 457 F 457 PS MB=DUMMY' TO 'IN 457 F 457 MB=DUMMY'
USE 'PMNAME'
USE 'PMIRPTnn'                   ◀ Specify the required report(s)
USE 'PMIRPT99'                   ◀ Optional

```

PMARPT00

```

                                PMCULLID for VSE/ESA
                                ↓
USE 'PMARPT00'
CHANGE 'IN 80'                    TO 'IN 363 V 367 UM(PMCULLIM) $'
CHANGE 'REC FILE1-EOF'           TO 'REC FILE1-EOF 283 1 2 $'
CHANGE 'CARD-REC 1'              TO 'CARD-REC 284'
CHANGE 'CARD-GRP 1'              TO 'CARD-GRP 284'
CHANGE 'IN 280'                  TO '00$'
CHANGE 'IN 496 F 496 PS MB=DUMMY' TO 'IN 496 F 496 MB=DUMMY'
USE 'PMNAME'
USE 'PMARPTnn'                   ◀ Specify the required report(s)
USE 'PMARPT99'                   ◀ Optional

```

Note: For both reports, 'IN 80' has 2 embedded spaces.

Note: **BS2000/OSD users** — Modify CHANGE card 1, 3, and 4 for all reports like this:

```

Card 1 – CHANGE 'IN 84'          TO 'IN 363 V 367 UM(PMCULLIB) $'
Card 3 – CHANGE 'CARD-REC 5'     TO 'CARD-REC 284'
Card 4 – CHANGE 'CARD-GRP 5'     TO 'CARD-GRP 284'

```

For more information: For information on the reports, see Chapter 3, “Interval Monitor Batch Reports” on page 3-1, and Chapter 4, “Application Monitor Batch Reports” on page 4-1. For information on the USE statement, see the *CULPRIT Reference*.

OS/390 blocksize considerations: The input JCL for the statistics input file (SYS011) must specify a `DCB=BLKSIZE=nnnnn` parameter. *Nnnnn* must be at least 280 bytes larger than the actual block size of the file. If the DCB specified is not large enough, CULPRIT may receive an 0C4 abend.

For example, if the input file has a blocksize of 11476, an appropriate SYS011 DD statement is:

```
//SYS011 DD DSN=PM.STATS,  
//          DISP=OLD,DCB=BLKSIZE=12000
```


Chapter 3. Interval Monitor Batch Reports

3.1 Overview	3-3
3.2 Requesting reports	3-5
3.2.1 Selection criteria parameters	3-5
3.2.1.1 Syntax	3-6
3.2.1.2 Parameters	3-7
3.2.1.3 Example	3-10
3.2.2 Report selection parameters	3-10
3.2.2.1 Syntax	3-11
3.2.2.2 Parameters	3-11
3.2.2.3 Example	3-13
3.3 Report samples	3-14
3.3.1 PMIRPT01: Management summary report	3-14
3.3.2 PMIRPT02: Trend analysis report	3-16
3.3.3 PMIRPT04: Summary wait detail report	3-17
3.3.4 PMIRPT05: DBkey/Area detail report	3-19
3.3.5 PMIRPT09: Shared cache summary report	3-20
3.3.6 PMIRPT10: DBGroup summary report	3-22
3.3.7 PMIRPT11: I/O by area summary report	3-22
3.3.8 PMIRPT12: I/O by file summary report	3-24
3.3.9 PMIRPT13: Buffer summary report	3-26
3.3.10 PMIRPT14: CDMSLIB summary report	3-29
3.3.11 PMIRPT15: Journal summary report	3-29
3.3.12 PMIRPT16: TP line summary report	3-32
3.3.13 PMIRPT17: Program pool summary report	3-35
3.3.14 PMIRPT18: Storage pool summary report	3-38
3.3.15 PMIRPT19: Storage waits summary report	3-41
3.3.16 PMIRPT21: I/O by area detail report	3-44
3.3.17 PMIRPT22: I/O by file detail report	3-46
3.3.18 PMIRPT23: Buffer detail report	3-48
3.3.19 PMIRPT24: CDMSLIB detail report	3-50
3.3.20 PMIRPT25: Journal detail report	3-51
3.3.21 PMIRPT27: Program pool detail report	3-53
3.3.22 PMIRPT29: Storage type detail report	3-55
3.3.23 PMIRPT30: Interval statistics summary report	3-57
3.3.24 PMIRPT32: Run unit statistics summary report	3-59
3.3.25 PMIRPT38: Journal block full detail report	3-60
3.3.26 PMIRPT40: Data sharing SYSPLEX detail report	3-62
3.3.27 PMIRPT90: Machine-readable copy	3-66
3.3.28 PMIRPT99: Input processing summary report	3-67

3.1 Overview

You can use Interval Monitor reports to:

- Track system utilization
- Perform trend analysis

You use a standard CA-CULPRIT job stream to run Interval Monitor reports. The report definitions are stored in the data dictionary. You can specify selection criteria to provide maximum control over the information printed.

The first section in this chapter describes how to request Interval Monitor reports. The remainder of the chapter contains a description of each of the numbered reports listed in the table below.

Report	Title/description
00	Extract and housekeeping routines (used internally)
PMNAME	Site or user name to appear in report heading lines
01	Management Summary Report
02	Trend Analysis Report
04	Summary Wait Detail
05	DBkey/Area Detail
09	Shared Cache Summary
10	DBGroup Summary
11	I/O by Area Summary
12	I/O by File Summary
13	Buffer Summary
14	CDMSLIB Summary
15	Journal Summary
16	TP Line Summary
17	Program Pool Summary
18	Storage Pool Summary
19	Storage Wait Summary
21	I/O by Area Detail
22	I/O by File Detail
23	Buffer Detail

Report	Title/description
24	CDMSLIB Detail
25	Journal Detail
27	Program Pool Detail
29	Storage Type Detail
30	Interval Statistics Summary
32	Run Unit Statistics Summary
38	Journal Block Full Detail
40	Data Sharing SYSPLEX Detail Report
99	Input Processing Summary Report

3.2 Requesting reports

You request Interval Monitor reports using a CA-CULPRIT job stream. The job control language you need to run the reports is shown in Chapter 2, “Preparing to Run Reports” on page 2-1. In the job stream, you supply:

- Selection criteria parameters — for including and/or excluding specific information from the reports
- Report specification parameters — for specifying the dictionary to use, formatting options, and the appropriate report names

You can request any or all of the reports in a single run.

General rules for parameter input

- Every parameter is optional.
- Include any or all of these parameters in a single run.
- Use a single line for each separate parameter.
- If you specify more than one parameter, *all* conditions that you specify must be met in order for you to select an interval for reporting.
- Use columns 1 through 72. Input beyond column 72 is ignored. No error is flagged (unless a quoted description is truncated).
- An asterisk (*) in column 1 indicates a comment line.
- Specify either the 3-letter abbreviation or the whole word. For example, EXCLUD is invalid. The syntax rules indicate (in uppercase characters) any other allowable abbreviations or synonyms.
- Blank lines are ignored but generate a warning message.

3.2.1 Selection criteria parameters

Include selection criteria parameters in your CA-CULPRIT JCL to include information in or exclude information from your Performance Monitor reports.

Selection criteria parameters apply to all of the reports you request in the same run. For example, if you specify a time interval using the REPORT FROM/THRU parameter, that interval is used for all of the reports in the run.

Positioning selection criteria parameters: Position your selection criteria parameters in the JCL stream as follows:

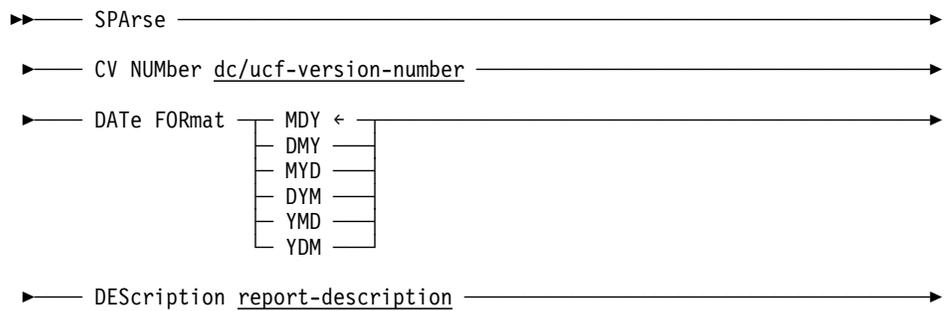
System	Position in JCL
OS/390	Following the //SYS010 DD * statement
VSE/ESA	Following the /* in the EXEC CULPRIT step
VM/ESA	In the SYS010 file
BS2000/OSD	In the SYS010 file

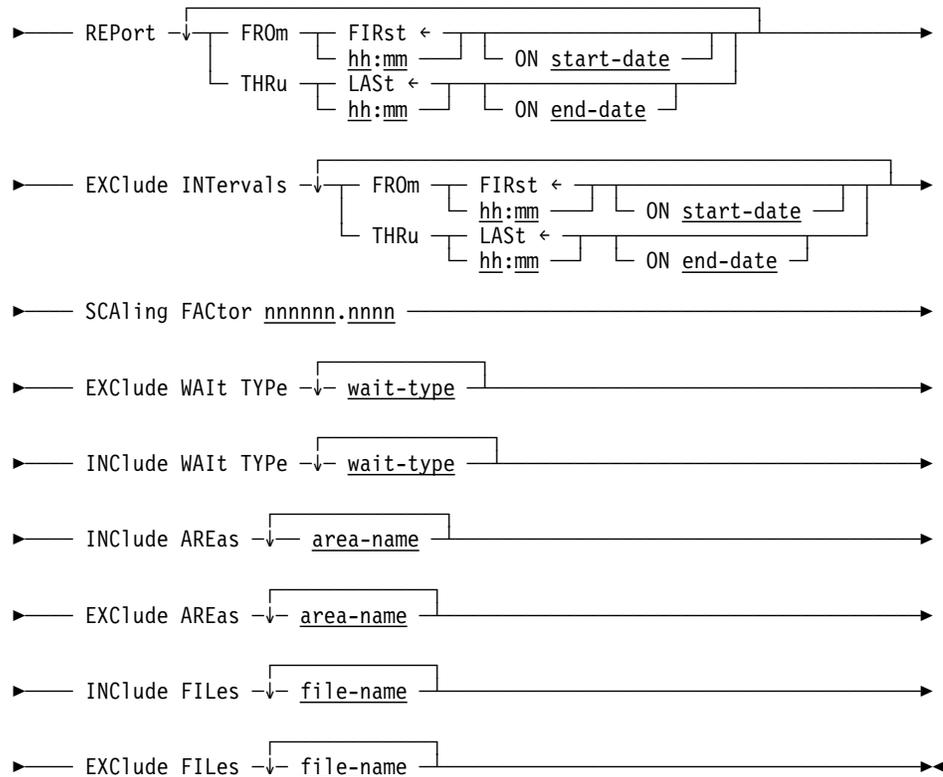
When you don't need selection parameters: If you don't need selection parameters for the run, then for:

- OS/390 — Use //SYS010 DD DUMMY
- VM/ESA — Leave out the parameters
- VSE/ESA — Use SYS010 DUMMY
- BS2000/OSD — Use /ADD-FILE-LINK L-NAME=SYS010,F-NAME=*DUMMY

3.2.1.1 Syntax

Descriptions for Interval Monitor selection criteria parameters follow the syntax diagram. You can omit leading zeros where syntax uses a number, unless otherwise noted.





3.2.1.2 Parameters

SPArse

Suppresses display of blank lines in these reports:

- PMIRPT11 (I/O by Area Summary)
- PMIRPT12 (I/O by File Summary)
- PMIRPT14 (CDMSLIB Summary)
- PMIRPT16 (TP Line Summary)

CV NUMBER dc/ucf-version-number

Identifies the DC/UCF system for which Performance Monitor is to report interval statistics; *dc/ucf-version-number* is a number between 0 and 9999. You can specify a system version value up to 20 times. You can place multiple values on one line. An acceptable abbreviation for NUMBER is NBR.

DATE FORMat MDY/DMY/MYD/DYM/YMD/YDM

Specifies the date format that appears on the reports. Additionally, the date format you choose is used for any date specification parameters. For example, if you specify DMY, Performance Monitor expects the REPORT FROM/THRU *start-date* and *end-date* to be in the format DMY. the default is MDY. An acceptable abbreviation for FORMAT is FMT.

DEscription report-description

Specifies a description to appear in the report footers. *Report-description* is a 1-through 64-character value. If it contains embedded spaces, you must use single quotes. Use two quotation marks to indicate a quotation mark that is part of the description.

REPort FROM/THRU

Selects intervals to be included in the report. If you want to report on the entire input file, don't include this parameter. You can specify this parameter once per run, and you must specify at least one FROM **or** one THRU. The default is FROM 00:00 ON 00/001 THRU 24:00 ON 99/365.

Regarding the time specification:

- Specify the time as *hh:mm* or *hhmm* (00:00 through 24:00).
- Times include the entire minute. For example, THRU 14:34 means up to 14:34:59.9999.
- Times must include the leading 0. For example, 09:00 is valid, but 9:00 is not.
- If you specify a time range, the FROM time must be earlier than the THRU time.

Regarding the date specification:

- Julian: *yy/ddd*
- Gregorian: as specified by DATE FORMAT
- The FROM date must be earlier or matching the THRU date.
- Slashes are optional in date specifications.

EXclude INTervals FROM/THRU

Specifies intervals to be excluded from the report. EXCLUDE INTERVALS follows the same general rules as REPORT FROM/THRU.

SCAling FACTor nnnnnn.nnnn

Defines a scaling factor for report graphs; *nnnnnn.nnnn* specifies the scaling factor (for example, .01 scaling data in hundredths). An acceptable synonym for the keyword is SCALE FACTOR.

Nnnnnn.nnnn is a numeric value. The decimal point is not required and, if present, can be leading or trailing. Any more than four digits to the right of the decimal point are truncated. For example, 1.2345678 will be truncated to 1.2345.

About the value you can specify:

- 0 is invalid.
- The default is 1.0.
- The maximum is 999999.9999.
- Examples of valid values:

3456	.3456
1234.5678	45.
000000.01	0.3

EXclude WAIT TYPE wait-type

Excludes specified wait types from PMIRPT01 (the Management Summary Report). You can specify multiple wait types and include them all on the same line.

Wait type	Meaning
AREA	Area waits
BUFFER	Buffer waits
CKUSER	Check-user waits
DBGROUP	DBGGroup waits
DBKEY	Db-key waits
DDS	DDS waits
ERUS	Run unit/request unit waits
EXTERNAL	External waits (outside the system)
INTERNAL	Internal waits (in the system)
IO	I/O waits
JOURNAL	Journal waits
JRNLFUF	Journal buffer waits
LDRSINGLE	Loader single-threaded waits
LINE	TP line waits
LOADS	Load-area waits
LOG	Log waits
LOGSINGLE	Log single-threaded waits
LOGFULL	Log full waits
MAXTASK	Waits because of maxtasks condition
PGMPOOL	Program-pool waits
PRIOR	Waits for a prior I/O (VSE/ESA only)
QUEUE	Queue-area waits
SCRATCH	Scratch-area waits
SCRSINGLE	Scratch single-thread waits
SHCACHE	Shared cache waits
STORAGE	Storage waits
XESLIST	Data sharing XES list waits
XESLOCK	Data sharing XES lock waits

INClude WAIT TYPE wait-type

Specifies that the named wait types be tallied together for PMIRPT02 (the Trend Analysis Report). You can specify multiple wait types and include them all on the same line. See EXCLUDE WAIT TYPE for acceptable *wait-type* values.

INClude AREa area-name

Includes the specified area or areas in PMIRPT05 (the DBkey/Area Detail Wait report) and PMIRPT11 (the I/O by Area Summary report).

General rules:

- Specify up to 100 areas, as needed
- You can have multiple area names on one line
- Area names can contain as many as 16 characters
- You cannot specify excludes and includes in a single run
- Criteria requested for one run applies to both the DBkey/Area and the I/O detail reports

EXClude AREa area-name

Excludes the specified area or areas from PMIRPT05 (the DBkey/Area Detail Wait report) and PMIRPT11 (the I/O by Area Summary report).

INClude FILE file-name

Specifies files to be included in PMIRPT09 (the Shared Cache Summary report) and PMIRPT12 (the I/O by File Summary report). A synonym for FILE is FILES. The same rules that apply to INCLUDE FILES also apply to INCLUDE AREAS.

EXClude FILE file-name

Excludes the specified file or files from PMIRPT09 (the Shared Cache Summary report) and PMIRPT12 (the I/O by File Summary report).

3.2.1.3 Example

The parameters below select only those intervals between 9:30 a.m. and 11:30 a.m., on June 16, 1999. The footers include the description PEAK MORNING PROCESSING ONLY, and the areas PAYRAREA and PERSAREA are excluded:

```
REPORT FROM 09:30 ON 6/16/99 THRU 11:30 ON 6/16/99
REPORT DESCRIPTION 'PEAK MORNING PROCESSING ONLY'
EXCLUDE AREAS PAYRAREA PERSAREA
```

3.2.2 Report selection parameters

Report selection parameters define:

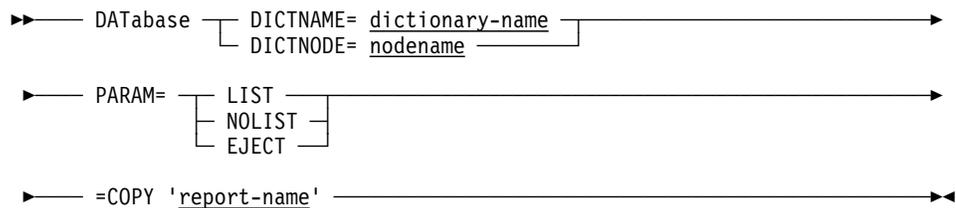
- The dictionary that contains the report definitions
- Whether to print CA-CULPRIT parameters
- Which reports to produce

Positioning report selection parameters: Position these parameters in the report-request JCL stream, using one line for each parameter:

System	Position in JCL
OS/390	Following the //SYSIN DD * statement
VSE/ESA	Following the EXEC CULPRIT statement
VM/ESA	Following the DATABASE statement
BS2000/OSD	In the SYSDTA system file; the corresponding filename is passed to the JCL procedure via the INPF symbolic parameter

Syntax and parameter descriptions for report selection parameters follow.

3.2.2.1 Syntax



3.2.2.2 Parameters

DATABASE

Defines the data dictionary that contains the report definitions (DICTNAME option) or the node that controls the dictionary (DICTNODE option). Start this parameter in column 2.

PARAM=LIST/NOLIST/EJECT

Controls printing of the CA-CULPRIT Sequential Input Parameter List:

- LIST (default) prints all parameters
- NOLIST prints no parameters
- EJECT starts each new listing at the top of a new page

Start this parameter in column 2.

=COPY 'report-name'

Requests the named report; begin =COPY in column 1; you can repeat the parameter any number of times. *Report-name* must be enclosed in quotes.

Value for report-name	Meaning
PMIRPT00	Performs housekeeping functions and extracts statistics for input to other reports; required, but not an output report
PMNAME	Supply the user site or company name to be printed in the heading of each report; required, but not an output report
PMIRPT99	List an input processing summary based on the selection criteria specified
PMIRPT nn	Produce the report defined by the number (nn) specified: <ul style="list-style-type: none"> 01 Management Summary Report 02 Trend Analysis Report 03 Variance Analysis Report 04 Detail Wait Report - Summary 05 Detail Report - Db-key/Area 09 Summary Report - Shared Cache 10 Summary Report - DBGroup 11 Summary Report - I/O by Area 12 Summary Report - I/O by File 13 Summary Report - Buffer 14 Summary Report - CDMSLIB 15 Summary Report - Journal 16 Summary Report - TP Line 17 Summary Report - Program Pool 18 Summary Report - Storage Pool 19 Summary Report - Storage Waits 21 Detail Report - I/O by Area 22 Detail Report - I/O by File 23 Detail Report - Buffer 24 Detail Report - CDMSLIB 25 Detail Report - Journal 27 Detail Report - Program Pool 29 Detail Report - Storage Type 30 Summary Report - Interval Statistics 32 Summary Report - Run Unit Statistics 38 Detail Report - Journal Block Full 40 Detail Report - Data Sharing SYSPLEX

3.2.2.3 Example

The following report parameters select all printed reports. The CA-CULPRIT report definitions are stored in the DICTCAS dictionary (DATABASE DICTNAME=DICTCAS). The report source (PARAM=NOLIST) is not printed.

```
DATABASE DICTNAME=DICTCAS
PARAM=NOLIST
=COPY 'PMIRPT00'
=COPY 'PMIRPT01'
=COPY 'PMIRPT02'
=COPY 'PMIRPT03'
=COPY 'PMIRPT04'
=COPY 'PMIRPT05'
=COPY 'PMIRPT06'
=COPY 'PMIRPT07'
=COPY 'PMIRPT08'
=COPY 'PMIRPT09'
=COPY 'PMIRPT10'
=COPY 'PMIRPT11'
=COPY 'PMIRPT12'
=COPY 'PMIRPT13'
=COPY 'PMIRPT14'
=COPY 'PMIRPT15'
=COPY 'PMIRPT16'
=COPY 'PMIRPT17'
=COPY 'PMIRPT18'
=COPY 'PMIRPT19'
=COPY 'PMIRPT20'
=COPY 'PMIRPT21'
=COPY 'PMIRPT22'
=COPY 'PMIRPT23'
=COPY 'PMIRPT24'
=COPY 'PMIRPT25'
=COPY 'PMIRPT26'
=COPY 'PMIRPT27'
=COPY 'PMIRPT28'
=COPY 'PMIRPT29'
=COPY 'PMIRPT30'
=COPY 'PMIRPT31'
=COPY 'PMIRPT32'
=COPY 'PMIRPT33'
=COPY 'PMIRPT34'
=COPY 'PMIRPT35'
=COPY 'PMIRPT36'
=COPY 'PMIRPT37'
=COPY 'PMIRPT38'
=COPY 'PMIRPT39'
=COPY 'PMIRPT40'
```

3.3 Report samples

The remainder of this chapter describes each report.

Required reports: These two required reports have no output:

- PMIRPT00 — Reads the input (archive) tape and formats it into global data fields; the data fields provide the input for all other reports
- PMNAME — Reads the PMNAME module and inserts its contents into a global field called COMPANY-NAME; this produces the heading for each report

Optional reports: The remaining optional reports for the Interval Monitor are described in numeric order. Each report description includes:

- An overview description
- A sample report
- A description of the fields in the report

3.3.1 PMIRPT01: Management summary report

PMIRPT01 is a summary report for all wait types not excluded by input selection parameters. The report shows the total wait count and time across all intervals on a graphic representation of wait time for that wait type. If any wait types were excluded by input selection parameters, the word EXCLUDED appears in the graph.

3.3.3 PMIRPT04: Summary wait detail report

PMIRPT04 is a summary report for each selected interval. The report shows information about the task activity that occurred during each interval.

Sample report:

START TIME	TASKS STRTD	TASKS ENDED	SYSTEM CPU (SECS)	USER CPU (SECS)	DB I/O WAITS	DB I/O WAIT TIME	OTHER I/O WAITS	OTHER I/O WAIT TIME	OTHER PGM WAITS	OTHER PGM WAIT TIME	MISC SYSTEM WAITS	MISC SYSTEM WAIT TIME
15:30:00	74	75	2.426		756	24.752	129	8.868	15	.010		
15:40:00	166	164	2.853		3481	99.392	436	16.642	20	2.000		
15:50:00	31	32	5.732		6229	296.651	433	24.249	8	.003	7	.182
16:00:00	2	1	.018		1611	64.028	621	27.502	4	.011		
16:10:00	22	22	11.919		10989	334.751	1750	46.569	13	.088	3	1.464
16:20:00	17	18	2.433		15998	411.194	997	44.953	10	.003	13	1.421
16:30:00	49	48	14.282		4608	146.877	281	22.819	10	1.677	47	11.164
16:40:00	87	89	.403		14	1.277	446	22.132	4		21	13.017
16:50:00	53	53	.261		23	.859	290	11.553	14	2.888	6	3.004

PMIRPT04 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Tasks Strtd	Count of tasks that were initiated during the interval
Tasks Ended	Count of tasks that terminated during the interval
System CPU	Total system CPU time used during the interval
User CPU	Total user CPU time used during the interval
DB I/O Waits	Count of database I/O waits during the interval
DB I/O Wait Time	Time spent in database I/O waits during the interval (<i>ssss.ttt</i>)

Field	Description
Other I/O Waits	Count of additional I/O waits during the interval, including waits for: <ul style="list-style-type: none"> ▪ Journal ▪ DDLDCLOG ▪ DDLDCRUN ▪ DDLDCMSG ▪ Program-load reads
Other I/O Wait Time	Time spent in additional I/O waits during the interval (<i>ssss.ttt</i>)
Other Pgm Waits	Count of additional program waits during the interval
Other Pgm Wait Time	Time (<i>ssss.ttt</i>) spent in additional program waits during the interval, including waits for: <ul style="list-style-type: none"> ▪ Db-keys ▪ Buffers ▪ Journal buffers ▪ Program pool ▪ Storage pool ▪ TPIO ▪ Area shared/protected/exclusive ▪ DBGroup
Misc System Waits	Miscellaneous system waits that occurred during the interval
Misc System Wait Time	Time spent in miscellaneous waits during the interval (<i>ssss.ttt</i>), including waits for: <ul style="list-style-type: none"> ▪ External request units ▪ Check user waits ▪ Log single threading and log full conditions ▪ Scratch single threading ▪ Loader single threading ▪ DDS ▪ New task conditions ▪ Unidentified external and internal waits

3.3.4 PMIRPT05: DBkey/Area detail report

PMIRPT05 contains detailed area-access information for each reported interval. The report shows one line for each area accessed during each interval that shows information on db-key and area waits.

Sample report:

START TIME	AREA NAME	DBKEY WAITS	DBKEY WAIT TIME	AREA BUFFER WAITS	BUFFER WAIT TIME	PAGE SHR WAITS	SHR WAIT TIME	PAGE EXCL WAITS	EXCL WAIT TIME
REPORT NO. 05 CA-IDMS/PM 15.0 CAGJF0 DC SYSTEM VERSION #: 56									
COMPUTER ASSOCIATES INTL. DBKEY/AREA DETAIL REPORT COMPUTER ASSOCIATES INTERNATIONAL, INC.									
06/19/99 PAGE 1 DATA FROM: 6/19/99									
16:20:00	CA30NWK.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	CA30NWK.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
	CFAXNWK.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	CFAXNWK.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
	CG30NWK.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	CG30NWK.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
	CKSXNWK.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	CKSXNWK.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
	CSADNWK.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	CSADNWK.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
	SYSTEM.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	SYSTEM.DDLDCLOG	0	.0000	0	.0000	0	.0000	0	.0000
	SYSTEM.DDLDCRUN	0	.0000	0	.0000	0	.0000	0	.0000
	SYSTEM.DDLDCSCR	0	.0000	0	.0000	0	.0000	0	.0000
	SYSTEM.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
16:30:00	CA30NWK.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	CA30NWK.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
	CFAXNWK.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	CFAXNWK.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
	CG30NWK.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	CG30NWK.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
	CKSXNWK.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	CKSXNWK.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
	CSADNWK.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	CSADNWK.DDLML	0	.0000	0	.0000	0	.0000	0	.0000
	SYSTEM.DDLDCLOD	0	.0000	0	.0000	0	.0000	0	.0000
	SYSTEM.DDLDCLOG	0	.0000	0	.0000	0	.0000	0	.0000
	SYSTEM.DDLDCRUN	0	.0000	0	.0000	0	.0000	0	.0000
	SYSTEM.DDLDCSCR	0	.0000	0	.0000	0	.0000	0	.0000
	SYSTEM.DDLML	0	.0000	0	.0000	0	.0000	0	.0000

PMIRPT05 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Area Name	Name of the DC/UCF area
DBkey Waits	Count of access requests in the area that required a wait on a db-key
DBkey Wait Time	Total time spent on db-key waits for the area (<i>ss.tttt</i>)
Area Buffer Waits	Number of times that tasks had to wait for a buffer pool page to become available for database page usage
Area Buffer Wait Time	Total time spent waiting for a buffer pool page to become available (<i>ss.tttt</i>)
Page Share Waits	Number of times that tasks had to wait for shared access to a database page that was already in a buffer pool
Page Share Wait Time	Total time spend waiting for shared access to an area's pages (<i>ss.tttt</i>)
Page Excl Waits	Number of times that tasks had to wait for exclusive access to a database page that was already in the buffer pool
Page Excl Wait Time	Total time spent waiting for exclusive access to an area's pages (<i>ss.tttt</i>)

3.3.5 PMIRPT09: Shared cache summary report

PMIRPT09 contains information about the use of the Shared Cache in the Coupling Facility. The report shows all the shared cache that were active in the corresponding intervals, and for each shared cache, all the files that were assigned to it. Files that were excluded by input selection parameters do not appear on the report.

Sample report:

START TIME	SHARED CACHE NAME	FILE NAME	NUMBER OF READS	FOUND IN CACHE	NUMBER OF WRITES	SH-CACHE WAITS	SH-CACHE WAIT TIME (SECS)	AVG SH-CACHE WAIT TIME (SECS)
7:54:10	IDMSCACHE00001	DBCR.ACCOUNTA	1		1			
		DBCR.ACCOUNTB						
		DBCR.ACCOUNTD						
	IDMSCACHE00002	DBCR.ACCOUNTC	1		1			
		DBCR.BRANCHA						
		DBCR.BRANCB						
		DBCR.BRANCB						
		DBCR.BRANCB						
		DBCR.BRANCB						
8:00:00	IDMSCACHE00001	DBCR.ACCOUNTA	1		1	2	.011	.0055
		DBCR.ACCOUNTB						
		DBCR.ACCOUNTD						
	IDMSCACHE00002	DBCR.ACCOUNTC	1		1	2	.037	.0184
		DBCR.BRANCHA						
		DBCR.BRANCB						
		DBCR.BRANCB						
		DBCR.BRANCB						
8:10:00	IDMSCACHE00001	DBCR.ACCOUNTA	31	17	14	43	.276	.0064
		DBCR.ACCOUNTB	39	21	18	56	.476	.0085
		DBCR.ACCOUNTD	49	20	29	76	.400	.0053
		DBCR.ACCOUNTC	32	12	20	51	.404	.0079
	IDMSCACHE00002	DBCR.ACCOUNTC	38	6	32	70	.490	.0070
		DBCR.BRANCHA						
		DBCR.BRANCB						
		DBCR.BRANCB						
		DBCR.BRANCB						
		DBCR.BRANCB	1		1	2	.037	.0187
		DBCR.BRANCB	2		2	4	.041	.0102

PMIRPT09 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Shared Cache Name	Name of the shared cache
File Name	Name of the file that is assigned to the corresponding shared cache
Number of Reads	Number of read requests from a specific file in the shared cache
Found in Cache	Number of times a database page we want to read was already present and valid in the shared cache
Number of Writes	Number of write requests to a specific file in the shared cache
Sh-Cache Waits	Number of waits for a specific file in the shared cache
Sh-Cache Wait Time	Amount of time spent waiting for a specific file in the shared cache
Avg Sh-Cache Wait Time	Average wait time for a specific file in the shared cache

3.3.6 PMIRPT10: DBGroup summary report

PMIRPT10 contains information about the use of the dynamic routing of database sessions. The report shows all the DBGroups to which database sessions have been dynamically routed for processing.

Sample report:

START TIME	DBGROUP NAME	NUMBER OF REQUESTS	DBGROUP WAITS	DBGROUP WAIT TIME (SECS)	AVG DBGROUP WAIT TIME (SECS)	SERVER NODE NAME	# REQUESTS PROCESSED
8:00:00	DBDCGR	1	1	.002	.0022	SYSTEM71	1
8:10:00	DBDCGR	1019	820	25.904	.0316	SYSTEM71	472
						SYSTEM74	547

PMIRPT10 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
DBGroup Name	Name of the DBGroup
Number of Requests	Total number of requests that have been submitted to the DBGroup
DBGroup Waits	Total number of waits for the DBGroup
DBGroup Wait Time	Total amount of time spent waiting for the DBGroup
Avg DBGroup Wait Time	Average wait time for the DBGroup
Server Node Name	Name of the server node
# Requests Processed	Number of requests submitted to the DBGroup that have been processed by the corresponding server number

3.3.7 PMIRPT11: I/O by area summary report

PMIRPT11 contains detailed I/O information for each reported interval. The report shows one line for each area accessed during each interval that shows information on I/O requests for the area.

Sample report:

START TIME	AREA NAME	READ I/O WAITS	READ WAIT TIME (SECS)	AVG READ WAIT TIME (SECS)	WRITE I/O WAITS	WRITE WAIT TIME (SECS)	AVG WRITE WAIT TIME (SECS)	BUFFER HITS	BUFFER WAITS	BUFFER WAIT TIME (SECS)	AVG BUFR WAIT TIME (SECS)	
REPORT NO. 11		COMPUTER ASSOCIATES INTL.						06/19/99		PAGE 1		
CA-IDMS/PM 15.0 CAGJF0		I/O BY AREA SUMMARY REPORT						DATA FROM: 6/19/99				
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.										
16:20:00	CA30NWK.DDLDCLOD	6										
	CA30NWK.DDLDML	14627	345.000	.0236								
	CFAXNWK.DDLDCLOD	777	33.000	.0425								
	CFAXNWK.DDLDML	5										
	CG30NWK.DDLDCLOD	147	7.000	.0476								
	CG30NWK.DDLDML											
	CKSXNWK.DDLDCLOD	427	25.000	.0585								
	CKSXNWK.DDLDML	5										
	CSADNWK.DDLDCLOD											
	CSADNWK.DDLDML											
	SYSTEM.DDLDCLOD	4										
	SYSTEM.DDLDCLOG				60	9.000	.1500					
	SYSTEM.DDLDCRUN											
	SYSTEM.DDLDCSCR				936	35.000	.0374					
	SYSTEM.DDLDML											
16:30:00	CA30NWK.DDLDCLOD	5										
	CA30NWK.DDLDML	4565	145.000	.0318								
	CFAXNWK.DDLDCLOD											
	CFAXNWK.DDLDML											
	CG30NWK.DDLDCLOD	5										
	CG30NWK.DDLDML											
	CKSXNWK.DDLDCLOD	5	1.000	.2000								
	CKSXNWK.DDLDML											
	CSADNWK.DDLDCLOD											
	CSADNWK.DDLDML											
	SYSTEM.DDLDCLOD	6										
	SYSTEM.DDLDCLOG				70	10.000	.1429					
	SYSTEM.DDLDCRUN				2							
	SYSTEM.DDLDCSCR				199	13.000	.0653					
	SYSTEM.DDLDML	17	1.000	.0588								

PMIRPT11 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Area Name	Name of the DC/UCF area
Read I/O Waits	Count of physical read I/Os that resulted in a wait
Read Wait Time	Total time spent waiting for physical read I/Os (<i>ss.ttt</i>)
Avg Read Wait Time	Average amount of time spent waiting for physical read I/Os against the area (<i>ss.tttt</i>)
Write I/O Waits	Count of physical write I/Os that resulted in a wait
Write Wait Time	Total time spent waiting for physical write I/Os (<i>ss.ttt</i>)
Avg Write Wait Time	Average amount of time spent waiting for physical write I/Os against the area (<i>ss.tttt</i>)
Buffer Hits	Count of requests that could be processed within the buffer, without a physical I/O
Buffer Waits	Count of waits for buffer requests; that is, the number of times a buffer was requested for the area but not available
Buffer Wait Time	Total time spent on buffer waits (<i>ss.ttt</i>)
Avg Bufr Wait Time	Average amount of time spent waiting for a buffer (<i>ss.tttt</i>)
Buffer Name	Buffer name for the area

3.3.8 PMIRPT12: I/O by file summary report

PMIRPT12 contains detailed I/O information for each reported interval. The report shows one line for each file accessed during each interval that shows information on I/O requests for the file.

Sample report:

START TIME	FILE NAME	READ I/O WAITS	READ WAIT TIME (SECS)	AVG READ WAIT TIME (SECS)	WRITE I/O WAITS	WRITE WAIT TIME (SECS)	AVG WRITE WAIT TIME (SECS)	BUFFER HITS	BUFFER WAIT TIME (SECS)	AVG BUFR WAIT TIME (SECS)
16:20:00	CA30NWK.CA30DML1	7355	173.000	.0235				50		
	CA30NWK.CA30DML2	7272	172.000	.0237				58		
	CA30NWK.CA30LOD	6						2		
	CFAXNWK.CFADML	5						1		
	CFAXNWK.CFALOD	777	33.000	.0425				16		
	CG30NWK.CG30DML									
	CG30NWK.CG30LOD	147	7.000	.0476				12		
	CKSXNWK.CKSDML	5						1		
	CKSXNWK.CKSLOD	427	25.000	.0585				13		
	CSADNWK.CSADDML1									
	CSADNWK.CSADDML2									
	CSADNWK.CSADLOD									
	SYSTEM.DCDML							22		
	SYSTEM.DCLOD	4						12		
	SYSTEM.DCLOG				60	9.000	.1500	0		
	SYSTEM.DCRUN									
	SYSTEM.DCSCR				936	35.000	.0374	0		
16:30:00	CA30NWK.CA30DML1	2303	70.000	.0304				13		
	CA30NWK.CA30DML2	2262	75.000	.0332				15		
	CA30NWK.CA30LOD	5						28		
	CFAXNWK.CFADML									
	CFAXNWK.CFALOD									
	CG30NWK.CG30DML									
	CG30NWK.CG30LOD	5						60		
	CKSXNWK.CKSDML									
	CKSXNWK.CKSLOD	5	1.000	.2000				28		
	CSADNWK.CSADDML1									
	CSADNWK.CSADDML2									
	CSADNWK.CSADLOD									
	SYSTEM.DCDML	17	1.000	.0588				33		
	SYSTEM.DCLOD	6						11		
	SYSTEM.DCLOG				70	10.000	.1429	0		
	SYSTEM.DCRUN				2			15		
	SYSTEM.DCSCR				199	13.000	.0653	0		

PMIRPT12 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
File Name	Name of the file
Read I/O Waits	Count of physical read I/Os that resulted in a wait
Read Wait Time	Total time spent waiting for physical read I/Os (<i>ss.ttt</i>)
Avg Read Wait Time	Average amount of time spent waiting for physical read I/Os against the file (<i>ss.tttt</i>)
Write I/O Waits	Count of physical write I/Os that resulted in a wait
Write Wait Time	Total time spent waiting for physical write I/Os (<i>ss.ttt</i>)
Avg Write Wait Time	Average amount of time spent waiting for physical write I/Os against the file (<i>ss.tttt</i>)
Buffer Hits	Number of times a request was filled by a page already in the buffer
Buffer Waits	Number of times a task had to wait because all the pages in the buffer pool were in use by other tasks
Buffer Wait Time	Total time spent waiting for a buffer to become available (<i>ss.ttt</i>)
Avg Bufr Wait Time	Average amount of time spent waiting for a buffer (<i>ss.tttt</i>)
Buffer Name	Name of the buffer with which the file is associated

3.3.9 PMIRPT13: Buffer summary report

PMIRPT13 contains information related to database and journal buffer use for each reported interval. The report shows one line of information for each buffer accessed.

Sample report:

START TIME	BUFFER NAME	BUFR RQSTS	BUFR FLSHS	BUFR HITS	HIT RATIO (%)	BUFR DISK I/O	I/O WAIT TIME (SECS)	AVERAGE I/O TIME (SECS)	BUFR WAITS	BUFFER WAIT TIME (SECS)	AVERAGE WAIT TIME (SECS)	BUFR PAGE SIZE
REPORT NO. 13 CA-IDMS/PM 15.0 CAGJF0 DC SYSTEM VERSION #: 56												
COMPUTER ASSOCIATES INTL. BUFFER SUMMARY REPORT COMPUTER ASSOCIATES INTERNATIONAL, INC.												
06/19/99 PAGE 2 DATA FROM: 6/19/99												
16:30:00	CA30DB-BUFFER	10	0	0	.0	0						0
	CSADDB-BUFFER	10	0	0	.0	0						0
	DCDML-BUFFER	5	0	0	.0	978560	7517.000					0
	DCLOD-BUFFER	10	0	0	.0	687616	16004.000					0
	DCMSG-BUFFER	5	0	0	.0	417280	2857.000					0
	DCRUN-BUFFER	10	0	0	.0	961664	98.000					0
	DCSEC-BUFFER	5	0	0	.0	95680	3343.000	.0001				0
	DEFAULT-BUFFER	10	0	0	.0	720000	65872.000	.0006				0
16:40:00	CA30DB-BUFFER	10	0	0	.0	0						0
	CSADDB-BUFFER	10	0	0	.0	0						0
	DCDML-BUFFER	5	0	0	.0	0						0
	DCLOD-BUFFER	10	0	0	.0	829184	23481.000					0
	DCMSG-BUFFER	5	0	0	.0	0						0
	DCRUN-BUFFER	10	0	65536	360.0	216704						0
	DCSEC-BUFFER	5	0	0	.0	0						0
	DEFAULT-BUFFER	10	0	0	.0	0						0
16:50:00	CA30DB-BUFFER	10	0	0	.0	0						0
	CSADDB-BUFFER	10	0	0	.0	0						0
	DCDML-BUFFER	5	0	0	.0	988224	4567.000					0
	DCLOD-BUFFER	10	0	0	.0	703872	12301.000					0
	DCMSG-BUFFER	5	0	0	.0	0	20.000					0
	DCRUN-BUFFER	10	0	0	.0	0						0
	DCSEC-BUFFER	5	0	0	.0	0	26.000					0
	DEFAULT-BUFFER	10	0	0	.0	0						0

PMIRPT13 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>).
Buffer Name	Name of the DC/UCF buffer pool.
Bufr Rqsts	Total number of database requests made against the buffer.
Bufr Flshs	Count of times a page had to be written to disk because another transaction required it.
Bufr Hits	Count of database requests that could be processed in the buffer without a physical I/O.
Hit Ratio	Ratio of the number of database requests that could be processed in the buffer without a physical I/O (hits) to the total number of buffer requests. For example, a hit ratio of 1.00 indicates that all database pages requested were available in the buffer. A hit ratio of 0.00 indicates that none of the database pages requested was available in the buffer.
Bufr Disk I/O	Count of requests that could not be processed in the buffer, and therefore required a physical I/O.
I/O Wait Time	Time spent waiting for I/O to complete requests that could not be processed in the buffer (<i>ss.ttt</i>).
Average I/O Time	Average amount of time spent waiting for I/O to complete requests that could not be processed in the buffer (<i>ss.tttt</i>).
Buffer Waits	Count of waits for buffer requests; that is, the number of times the buffer was requested but not available.
Buffer Wait Time	Total time spent on buffer waits (<i>ss.ttt</i>).
Average Wait Time	Average amount of time spent on buffer waits (<i>ss.tttt</i>).
Bufr Page Size	Size of the largest page maintained in the buffer pool, in bytes.
Bufr Read	Number of times a database page was read from disk, not from the buffer.
Bufr Write	Number of times a buffer page was discarded from the journal buffers in order to read another page.

3.3.10 PMIRPT14: CDMSLIB summary report

PMIRPT14 contains CDMSLIB information for each reported interval.

Sample report:

START TIME	CDMS LIBRARY NAME	PROGRAM LOAD WAITS	LOAD WAIT TIME (SECS)	AVG LOAD WAIT TIME (SECS)
14:58:16	CDMSLIB	27	1.128	.0418
15:00:00	CDMSLIB	1	.100	.1001
15:10:00	CDMSLIB	14	.618	.0441
15:20:00	CDMSLIB	0		
15:30:00	CDMSLIB	12	.418	.0349
15:40:00	CDMSLIB	42	2.022	.0481
15:50:00	CDMSLIB	27	1.507	.0558
16:00:00	CDMSLIB	2	.084	.0419
16:10:00	CDMSLIB	0		
16:20:00	CDMSLIB	1	.066	.0656
16:30:00	CDMSLIB	10	.520	.0520
16:40:00	CDMSLIB	3	.129	.0431
16:50:00	CDMSLIB	11	.489	.0444

PMIRPT14 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
CDMS Library Name	Name of the load library specified by ddname CDMSLIB
Program Load Waits	Total number of program load waits during the interval
Load Wait Time	Total time spent on program load waits during the interval (<i>ss.ttt</i>).
Avg Load Wait Time	Average amount of time for each program load wait during the interval (<i>ss.tttt</i>).

3.3.11 PMIRPT15: Journal summary report

PMIRPT15 contains detailed journal-access information for each reported interval. The report shows one line for each journal file accessed during each interval that shows information on access requests.

3.3 Report samples

Sample report:

REPORT NO. 15			COMPUTER ASSOCIATES INTL.						06/27/99 PAGE		2		
CA-IDMS/PM 15.0 CAGJF0			JOURNAL SUMMARY REPORT										
DC SYSTEM VERSION #: 56			COMPUTER ASSOCIATES INTERNATIONAL, INC.						DATA FROM: 6/26/99				
START TIME	JOURNAL NAME	BLOCKS WRITTEN	READ WAITS	READ WAIT TIME (SECS)	AVG READ WAIT TIME (SECS)	WRITE WAITS	WRITE WAIT TIME (SECS)	AVG WRITE WAIT TIME (SECS)	JOURNAL BUFFER WAITS	JRNL BUFR WAIT TIME (SECS)	AVG BUFR WAIT TIME (SECS)	BEGIN JRNL RBN	END JRNL RBN
8:30:00	J1JRNL		540	14.719	.0273								
	J2JRNL		540	9.593	.0178								
	J3JRNL	4329	540	15.297	.0283	1302	39.673	.0305				6554	7855
8:45:00	J1JRNL		537	12.358	.0230								
	J2JRNL		537	9.490	.0177								
	J3JRNL	4635	537	15.605	.0291	1165	41.027	.0352				7856	9020

PMIRPT15 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Journal Name	Name of the journal file, as defined in the DMCL
Blocks Written	Number of blocks written to the journal file during the interval
Read Waits	Count of physical read (rollback) I/Os against the journal; all physical read I/Os result in a wait
Read Wait Time	Total time spent waiting for physical read I/Os against the journal (<i>ss.ttt</i>)
Avg Read Wait Time	Average amount of time spent waiting for physical read I/Os against the journal (<i>ss.tttt</i>)
Write Waits	Count of physical write I/Os against the journal; all physical write I/Os result in a wait
Write Wait Time	Total time spent waiting for physical write I/Os against the journal (<i>ss.ttt</i>)
Avg Write Wait Time	Average amount of time spent waiting for physical write I/Os against the journal (<i>ss.tttt</i>)
Journal Buffer Waits	Number of time the task had to wait because all the journal buffers were in use by other tasks
Jrnl Bufr Wait Time	Total time spent waiting for a journal buffer (<i>ss.ttt</i>)
Avg Bufr Wait Time	Average amount of time spent waiting for a journal buffer (<i>ss.tttt</i>)
Begin Jrnl RBN	Relative block number of the first block written to the journal during the interval
End Jrnl RBN	Relative block number of the last block written to the journal during the interval

3.3.12 PMIRPT16: TP line summary report

PMIRPT16 contains information about teleprocessing line usage and waits for each interval.

Sample report:

START TIME	LINE NAME	NUM TRMS	TRMNL READS	TRMNL WRITES	READ ERRS	WRITE ERRS	TRMNL I/O WAITS	TRMNL I/O WAIT TIME (SECS)	AVG TRMNL I/O TIME (SECS)	NUM RPLS SGEND	NUM RPL RQSTS	RPL WAITS	RPL WAIT TIME (SECS)	AVG RPL WAIT TIME (SECS)
16:00:00	CCI56	10												
	CONSOLE	1												
	JESRDR	1												
	PRINT56	9								10	1			
	UCF56	6												
	VTAM56	50	2	121			4	.011	.0028	10	1820			
16:10:00	CCI56	10												
	CONSOLE	1												
	JESRDR	1												
	PRINT56	9								10	1			
	UCF56	6												
	VTAM56	50	22	137			13	.088	.0067	10	2098			
16:20:00	CCI56	10												
	CONSOLE	1												
	JESRDR	1												
	PRINT56	9								10	1			
	UCF56	6												
	VTAM56	50	19	119			10	.003	.0003	10	2333			
16:30:00	CCI56	10												
	CONSOLE	1												
	JESRDR	1												
	PRINT56	9								10	1			
	UCF56	6												
	VTAM56	50	45	89			10	1.677	.1677	10	2515			
16:40:00	CCI56	10												
	CONSOLE	1												
	JESRDR	1												
	PRINT56	9								10	1			
	UCF56	6												
	VTAM56	50	87	93			4		.0001	10	2699			
16:50:00	CCI56	10												
	CONSOLE	1												
	JESRDR	1												
	PRINT56	9								10	1			
	UCF56	6												
	VTAM56	50	58	57			14	2.888	.2063	10	2822			

PMIRPT16 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Line Name	Name of line, as defined with system generation LINE statement
Num Trms	Number of terminals on the line, as defined with system generation LTERM and PTERM statements
Trmnl Reads	Number of terminal reads that occurred during the interval
Trmnl Writes	Number of terminal writes that occurred during the interval
Read Errs	Number of read errors that occurred during the interval
Write Errs	Number of write errors that occurred during the interval
Trmnl I/O Waits	Number of waits for terminal I/O during the interval
Trmnl I/O Wait Time	Number of seconds waiting for terminal I/O during the interval (<i>ss.ttt</i>).
Avg Trmnl I/O Time	Average length of a wait for terminal I/O during the interval (<i>ss.tttt</i>).
Num RPLs Sgend	Number of request parameter lists (RPLs) specified with the system generation LINE statement RPL COUNT parameter
Num RPL Rqsts	Number of RPL requests during the interval
RPL Waits	Number of waits for an RPL during the interval
RPL Wait Time	Number of seconds spent waiting for an RPL during the interval (<i>ss.ttt</i>).
Avg RPL Wait Time	Average number of seconds for an RPL wait during the interval (<i>ss.tttt</i>).

3.3.13 PMIRPT17: Program pool summary report

PMIRPT17 contains information about the use of program pools for each reported interval. The report shows one line of information for each program pool used during the interval.

3.3 Report samples

Sample report:

REPORT NO. 17		COMPUTER ASSOCIATES INTL.						06/19/99 PAGE 1					
CA-IDMS/PM 15.0 CAGJF0		PROGRAM POOL SUMMARY REPORT											
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.						DATA FROM: 6/19/99					
START TIME	POOL TYPE	POOL SIZE (K)	IN USE (K)	HIGH WATER (K)	SPACE LOADED (K)	PGM POOL LOADS	INTO UNALLOC SPACE	OVRLAY UNUSED PGM	OVRLAY PGM IN USE	POOL WAITS	LOAD WAITS	PGMLOAD WAIT TIME (SECS)	AVG LOAD WAIT TIME (SECS)
14:58:16	XA REENT	3788	1562	1562	1562	113	113						
	REENT	1364	394	394	394	32	32						
	PROGRAM	500	136	136	136	1	1						
15:00:00	XA REENT	3788	1583	1583		21	1	1					
	REENT	1364	394	394									
	PROGRAM	500	136	136									
15:10:00	XA REENT	3788	1653	1653	70	13	13						
	REENT	1364	394	394									
	PROGRAM	500	136	136									
15:20:00	XA REENT	3788	1653	1653									
	REENT	1364	394	394									
	PROGRAM	500	136	136									
15:30:00	XA REENT	3788	2529	2529	876	65	65						
	REENT	1364	404	404	11	7	7						
	PROGRAM	500	168	168	32	1	1						
15:40:00	XA REENT	3788	3771	3784	2679	106	63	43					
	REENT	1364	406	406	2	2	2						
	PROGRAM	500	168	168									
15:50:00	XA REENT	3788	3774	3784	305	22	3	19					
	REENT	1364	406	406									
	PROGRAM	500	168	168									
16:00:00	XA REENT	3788	3774	3784	34	2		2					
	REENT	1364	406	406									
	PROGRAM	500	168	168									
16:10:00	XA REENT	3788	3774	3784									
	REENT	1364	406	406									
	PROGRAM	500	168	168									
16:20:00	XA REENT	3788	3776	3784	2	1	1						
	REENT	1364	406	406									
	PROGRAM	500	168	168									
16:30:00	XA REENT	3788	3781	3784	42	10	4	6					
	REENT	1364	406	406									
	PROGRAM	500	168	168									
16:40:00	XA REENT	3788	3784	3784	5	3	2	1					
	REENT	1364	406	406									
	PROGRAM	500	168	168									
16:50:00	XA REENT	3788	3785	3785	36	11	2	9					
	REENT	1364	406	406									
	PROGRAM	500	168	168									

PMIRPT17 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Pool Type	Type of program pool
Pool Size	Size of the program pool, specified in kilobytes
In Use	Amount of the program pool in use at the end of the interval, specified in kilobytes
High Water	Highest amount of the program pool in use at any point in time during the interval, specified in kilobytes
Space Loaded	Amount of program pool space loaded from disk during the interval
Pgm Pool Loads	Count of programs loaded into the pool during the interval
Into Unalloc Space	Count of loads into unallocated space
Ovrlay Unused Pgm	Count of loads overlaying a program not currently in use
Ovrlay Pgm In Use	Count of loads overlaying a program currently in use
Pool Waits	Number of times an active task had to wait for space in a pool
Load Waits	Number of times the system had to wait to load a program once storage was available in the pool; usually caused by I/O to the load library or load area
Pgmload Wait Time	Time spent waiting to load programs
Average Load Wait Time	Average amount of time spent waiting to load programs

3.3.14 PMIRPT18: Storage pool summary report

PMIRPT18 contains information about storage pool activity for each reported interval. The report shows one line of information for each storage pool accessed during each interval.

Sample report:

START TIME	POOL NUMBER	POOL SIZE (K)	IN USE (K)	HIGH WATER (K)	STG CUSHION (K)	TIMES SOS	STORAGE GETS	STORAGE FREES	STG PASS 1	STG PASS 2	STG PASS 3	
REPORT NO. 18	CA-IDMS/PM 15.0	CAGJF0	COMPUTER ASSOCIATES INTL.				06/19/99	PAGE 1				
DC SYSTEM VERSION #:	56	STORAGE POOL SUMMARY REPORT				COMPUTER ASSOCIATES INTERNATIONAL, INC.		DATA FROM: 6/19/99				
14:58:16	0	1016	112	116	100		325	260	219	106		
	128	1500	296	368	100		351	284	246	105		
	255	1500	500	504	0		256	138	204	52		
15:00:00	0	1016	112	116	100		121	119		121		
	128	1500	304	368	100		7	4	4	3		
	255	1500	500	504	0		135	130	131	4		
15:10:00	0	1016	112	116	100		151	150	5	146		
	128	1500	304	452	100		114	112	72	42		
	255	1500	500	504	0		157	156	133	24		
15:20:00	0	1016	112	116	100		120	120		120		
	128	1500	304	452	100							
	255	1500	500	504	0		132	132	131	1		
15:30:00	0	1016	112	116	100		378	319	151	227		
	128	1500	316	452	100		2403	2382	1355	1048		
	255	1500	516	528	0		1892	1884	522	1370		
15:40:00	0	1016	116	116	100		521	459	182	339		
	128	1500	396	452	100		2927	2781	1918	1009		
	255	1500	552	552	0		1690	1670	492	1198		
15:50:00	0	1016	116	156	100		234	223	60	174		
	128	1500	308	452	100		668	586	452	216		
	255	1500	552	572	0		411	411	174	237		
16:00:00	0	1016	152	156	100		134	122	10	124		
	128	1500	344	452	100		14	11	8	6		
	255	1500	596	596	0		155	148	137	18		
16:10:00	0	1016	152	156	100		242	230	109	133		
	128	1500	348	452	100		189	187	122	67		
	255	1500	632	636	0		301	300	157	144		
16:20:00	0	1016	164	200	100		186	184	78	108		
	128	1500	360	452	100		180	169	105	75		
	255	1500	632	636	0		279	277	141	138		
16:30:00	0	1016	128	200	100		172	173	120	52		
	128	1500	380	456	100		564	525	232	332		
	255	1500	556	636	0		382	393	107	275		
16:40:00	0	1016	128	200	100		265	267	101	164		
	128	1500	372	588	100		628	611	256	372		
	255	1500	560	636	0		242	244	155	87		

PMIRPT18 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Pool Number	Number that identifies the storage pool, as assigned at system generation
Pool Size	Size of the storage pool, specified in kilobytes
In Use	Amount of the storage pool in use at the end of the interval, specified in kilobytes
High Water	The most storage used in that pool during the interval, specified in kilobytes
Storage Cushion	Size of the storage cushion, specified in kilobytes
Times SOS	Number of times the short-on-storage condition occurred during the interval
Storage Gets	Count of get-storage (#GETSTG) requests issued against the pool during the interval
Storage Frees	Count of free-storage (#FREESTG) requests issued against the pool during the interval
Stg Pass 1	Number of times the space requested by a #GETSTG command was allocated using Scan 1
Stg Pass 2	Number of times the space requested by a #GETSTG command was allocated using Scan 2
Stg Pass 3	This field is no longer used

3.3.15 PMIRPT19: Storage waits summary report

PMIRPT19 contains information about storage type waits for each reported interval. The report shows 1 column of information for each storage type for each interval.

3.3 Report samples

Sample report:

START TIME	SHRD STG	SHRD WAIT	AVG SHRD	SHRD KEPT	SKEPT WAIT	AVG SKEPT	USER STG	USER WAIT	AVG USER	USER KEPT	UKEPT WAIT	AVG UKEPT	OTHER STG	OTHER WAIT	AVG OTHER
STGLLOC	WAITS	TIME	TIME	WAITS	TIME	TIME	WAITS	TIME	TIME	WAITS	TIME	TIME	WAITS	TIME	TIME
14:58:16															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
15:00:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
15:10:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
15:20:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
15:30:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
15:40:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
15:50:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
16:00:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
16:10:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
16:20:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
16:30:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		
16:40:00															
NON-XA	0			0			0			0			0		
XA	0			0			0			0			0		

PMIRPT19 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Stgloc	Whether the storage resides above the line (XA) or below the line (NON-XA); there should be very few waits for XA storage
Shrd Stg Waits	Number of waits to acquire shared storage during the interval
Shrd Wait Time	Amount of time spent waiting to acquire shared storage during the interval (<i>ss.ttt</i>).
Avg Shrd Time	Average length of a wait to acquire shared storage during the interval (<i>ss.tttt</i>).
Shrd Kept Waits	Number of waits to acquire shared kept storage during the interval
Skept Wait Time	Amount of time spent waiting to acquire shared kept storage during the interval (<i>ss.ttt</i>).
Avg Skept Time	Average length of a wait to acquire shared kept storage during the interval (<i>ss.tttt</i>).
User Stg Waits	Number of waits to acquire user storage during the interval
User Wait Time	Amount of time spent waiting to acquire user storage during the interval (<i>ss.ttt</i>).
Avg User Time	Average length of a wait to acquire user storage during the interval (<i>ss.tttt</i>).
User Kept Waits	Number of waits to acquire user kept storage during the interval
Ukept Wait Time	Amount of time spent waiting to acquire user kept storage during the interval (<i>ss.ttt</i>).
Avg Ukept Time	Average length of a wait to acquire user kept storage during the interval (<i>ss.tttt</i>).
Other Stg Waits	Number of waits to acquire terminal, database, or system storage
Other Wait Time	Amount of time spent waiting to acquire terminal, database, or system storage during the interval (<i>ss.ttt</i>).
Avg Other Time	Average length of a wait to acquire terminal, database, or system storage during the interval (<i>ss.tttt</i>).

3.3.16 PMIRPT21: I/O by area detail report

PMIRPT21 contains detailed information about an area's input/output during a specific interval.

Sample report:

REPORT NO. 21	COMPUTER ASSOCIATES INTL.		06/19/99 PAGE	1
CA-IDMS/PM 15.0 CAGJF0	I/O BY AREA DETAIL REPORT			
DC SYSTEM VERSION #: 56	COMPUTER ASSOCIATES INTERNATIONAL, INC.		DATA FROM: 6/19/99	
INTERVAL	START TIME:16:20:00	END TIME: 16:30:00		
AREA NAME: CA30NWK.DDLDM	14736	FILE NAME: CA30NWK.CA30DML2	108	BUFFER NAME: DEFAULT-BUFFER
14628	AREA ACCESS WAITS	AREA ACCESSES		PHYSICAL WRITES
--READ I/O WAITS--	PHYSICAL READS	BUFFER HITS		
14627	TOT WAITS			--WRITE I/O WAITS--
345.000	TOT WAIT TIME	.0236	AVG WAIT TIME	TOT WAITS
	HIGHEST WAIT TIME			TOT WAIT TIME
				HIGHEST WAIT TIME
--DB BUFFER WAITS--				--SHARED BUFFER WAITS--
	TOT WAITS			TOT WAITS
	TOT WAIT TIME	AVG WAIT TIME		TOT WAIT TIME
	HIGHEST WAIT TIME			HIGHEST WAIT TIME
--EXCLUSIVE BUFFER WAITS--				--DBKEY WAITS--
	TOT WAITS			TOT WAITS
	TOT WAIT TIME	AVG WAIT TIME		TOT WAIT TIME
	HIGHEST WAIT TIME			HIGHEST WAIT TIME
INTERVAL	START TIME:16:20:00	END TIME: 16:30:00		
AREA NAME: CFAXNWK.DDLDCLOD	793	FILE NAME: CFAXNWK.CFALOD	16	BUFFER NAME: DCLOD-BUFFER
777	AREA ACCESS WAITS	AREA ACCESSES		PHYSICAL WRITES
--READ I/O WAITS--	PHYSICAL READS	BUFFER HITS		
777	TOT WAITS			--WRITE I/O WAITS--
33.000	TOT WAIT TIME	.0425	AVG WAIT TIME	TOT WAITS
	HIGHEST WAIT TIME			TOT WAIT TIME
				HIGHEST WAIT TIME
--DB BUFFER WAITS--				--SHARED BUFFER WAITS--
	TOT WAITS			TOT WAITS
	TOT WAIT TIME	AVG WAIT TIME		TOT WAIT TIME
	HIGHEST WAIT TIME			HIGHEST WAIT TIME
--EXCLUSIVE BUFFER WAITS--				--DBKEY WAITS--
	TOT WAITS			TOT WAITS
	TOT WAIT TIME	AVG WAIT TIME		TOT WAIT TIME
	HIGHEST WAIT TIME			HIGHEST WAIT TIME

PMIRPT21 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
End Time	Ending time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Area Name	Name of the area
File Name	Name of a file to which area maps
Buffer Name	Name of area's associated buffer
Area Access Waits	Number of times task waited to ready an area in a required usage mode
Area Accesses	Number of times task readied an area
Physical Writes	Number of physical writes for the area
Physical Reads	Number of physical reads for the area
Buffer Hits	Number of database area requests that could be processed in the buffer without a physical I/O
Read I/O Waits	Number of physical read I/Os that resulted in a wait and the total, highest, and average wait times
Write I/O Waits	Number of physical write I/Os that resulted in a wait and the total, highest, and average wait times
DB Buffer Waits	Number of times a page within the area had to wait for a buffer page to become available and the total, highest, and average wait times
Shared Buffer Waits	Number of times transactions wanted to access a database page that was exclusively held by another transaction and the total, highest, and average wait times
Exclusive Buffer Waits	Number of times transactions waited for exclusive access to a database page and the total, highest, and average wait times
DBkey Waits	Number of waits for a db-key and the total, highest, and average wait times

3.3.17 PMIRPT22: I/O by file detail report

PMIRPT22 contains detailed information about a file's input/output during a specific interval.

Sample report:

REPORT NO. 22	COMPUTER ASSOCIATES INTL.	06/19/99	PAGE	1
CA-IDMS/PM 15.0 CAGJF0	I/O BY FILE DETAIL REPORT			
DC SYSTEM VERSION #: 56	COMPUTER ASSOCIATES INTERNATIONAL, INC.	DATA FROM:	6/19/99	
<p>INTERVAL START TIME:16:20:00 END TIME: 16:30:00</p> <p>FILE NAME: CA30NWK.CA30DML1 BUFFER: DEFAULT-BUFFER</p> <p>--READ I/O WAITS-- --WRITE I/O WAITS--</p> <p>7355 TOT WAITS TOT WAITS</p> <p>173.000 TOT WAIT TIME .0235 AVG WAIT TIME TOT WAIT TIME AVG WAIT TIME</p> <p>HIGHEST WAIT TIME HIGHEST WAIT TIME</p> <p>--DB BUFFER WAITS-- --SHARED BUFFER WAITS--</p> <p>TOT WAITS TOT WAITS</p> <p>TOT WAIT TIME AVG WAIT TIME TOT WAIT TIME AVG WAIT TIME</p> <p>HIGHEST WAIT TIME HIGHEST WAIT TIME</p> <p>--EXCLUSIVE BUFFER WAITS-- --DBKEY WAITS--</p> <p>TOT WAITS TOT WAITS</p> <p>TOT WAIT TIME AVG WAIT TIME TOT WAIT TIME AVG WAIT TIME</p> <p>HIGHEST WAIT TIME HIGHEST WAIT TIME</p> <p>INTERVAL START TIME:16:20:00 END TIME: 16:30:00</p> <p>FILE NAME: CA30NWK.CA30DML2 BUFFER: DEFAULT-BUFFER</p> <p>--READ I/O WAITS-- --WRITE I/O WAITS--</p> <p>7272 TOT WAITS TOT WAITS</p> <p>172.000 TOT WAIT TIME .0237 AVG WAIT TIME TOT WAIT TIME AVG WAIT TIME</p> <p>HIGHEST WAIT TIME HIGHEST WAIT TIME</p> <p>--DB BUFFER WAITS-- --SHARED BUFFER WAITS--</p> <p>TOT WAITS TOT WAITS</p> <p>TOT WAIT TIME AVG WAIT TIME TOT WAIT TIME AVG WAIT TIME</p> <p>HIGHEST WAIT TIME HIGHEST WAIT TIME</p> <p>--EXCLUSIVE BUFFER WAITS-- --DBKEY WAITS--</p> <p>TOT WAITS TOT WAITS</p> <p>TOT WAIT TIME AVG WAIT TIME TOT WAIT TIME AVG WAIT TIME</p> <p>HIGHEST WAIT TIME HIGHEST WAIT TIME</p>				

PMIRPT22 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
End Time	Ending time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
File Name	Name of the file
Buffer	Name of buffer associated with file
Read I/O Waits	Number of physical read I/Os that resulted in a wait and the total, highest, and average wait times
Write I/O Waits	Number of physical write I/Os that resulted in a wait and the total, highest, and average wait times
DB Buffer Waits	Number of times a page within the area had to wait for a buffer page to become available and the total, highest, and average wait times
Shared Buffer Waits	Number of times transactions wanted to access a database page that was exclusively held by another transaction and the total, highest, and average wait times
Exclusive Buffer Waits	Number of times transactions waited for exclusive access to a database page and the total, highest, and average wait times
DBkey Waits	Number of waits for a db-key and the total, highest, and average wait times

3.3.18 PMIRPT23: Buffer detail report

PMIRPT23 contains detailed information about a buffer's input/output during a specific interval.

Sample report:

REPORT NO. 23	COMPUTER ASSOCIATES INTL.		06/19/99	PAGE 7
CA-IDMS/PM 15.0 CAGJF0	BUFFER DETAIL REPORT			
DC SYSTEM VERSION #: 56	COMPUTER ASSOCIATES INTERNATIONAL, INC.		DATA FROM: 6/19/99	
INTERVAL START TIME:15:00:00 END TIME: 15:10:00				
BUFFER NAME:DCDML-BUFFER BUFFER PAGE SIZE: BUFFER PAGE DEFINED: 76				
5	BUFFER READS 655360	BUFFER WRITES 5	BUFFER PGS IN USE	BUFFER FLUSHES
	BUFFER REQUESTS	PAGES FND IN POOL .0	PGS FND RATIO (%)	
--READ I/O WAITS--				
756608	TOT WAITS	--WRITE I/O WAITS--		TOT WAITS
39.000	TOT WAIT TIME	AVG WAIT TIME	26693.000	TOT WAIT TIME
	HIGHEST WAIT TIME		26.000	HIGHEST WAIT TIME
--DB BUFFER WAITS--				
	TOT WAITS	--SHARED BUFFER WAITS--		TOT WAITS
	TOT WAIT TIME	AVG WAIT TIME	TOT WAIT TIME	AVG WAIT TIME
	HIGHEST WAIT TIME		HIGHEST WAIT TIME	
--EXCLUSIVE BUFFER WAITS--				
	TOT WAITS	AVG WAIT TIME		
	TOT WAIT TIME	AVG WAIT TIME		
	HIGHEST WAIT TIME	HIGHEST WAIT TIME		
INTERVAL START TIME:15:00:00 END TIME: 15:10:00				
BUFFER NAME:DCLOD-BUFFER BUFFER PAGE SIZE: BUFFER PAGE DEFINED: 76				
10	BUFFER READS	BUFFER WRITES 10	BUFFER PGS IN USE	BUFFER FLUSHES
	BUFFER REQUESTS	PAGES FND IN POOL .0	PGS FND RATIO (%)	
--READ I/O WAITS--				
	TOT WAITS	--WRITE I/O WAITS--		TOT WAITS
	TOT WAIT TIME	AVG WAIT TIME	TOT WAIT TIME	AVG WAIT TIME
	HIGHEST WAIT TIME		HIGHEST WAIT TIME	
--DB BUFFER WAITS--				
	TOT WAITS	--SHARED BUFFER WAITS--		TOT WAITS
	TOT WAIT TIME	AVG WAIT TIME	TOT WAIT TIME	AVG WAIT TIME
	HIGHEST WAIT TIME		HIGHEST WAIT TIME	
--EXCLUSIVE BUFFER WAITS--				
	TOT WAITS	AVG WAIT TIME		
	TOT WAIT TIME	AVG WAIT TIME		
	HIGHEST WAIT TIME	HIGHEST WAIT TIME		

PMIRPT23 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
End Time	Ending time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Buffer Name	Name of buffer
Buffer Page Size	Size of buffer pages
Buffer Page Defined	Number of pages defined for buffer
Buffer Reads	Number of times DBMS requested a new database page for which a physical I/O occurred
Buffer Writes	Number of times a buffer page was discarded in order to read another page
Buffer Pgs In Use	Number of pages currently in use in the buffer
Buffer Flushes	Number of times a page was discarded from the buffer in order to read another page
Buffer Requests	Total number of buffer requests (the sum of Pages Fnd in Pool and Buffer Reads)
Pages Fnd In Pool	Number of database area requests that could be processed in the buffer without a physical I/O
Pages Fnd Ratio (%)	Percent of Pages Fnd in Pool to Buffer Requests; this ratio should be as close to 100 as possible
Read I/O Waits	Number of physical read I/Os that resulted in a wait and the total, highest, and average wait times
Write I/O Waits	Number of physical write I/Os that resulted in a wait and the total, highest, and average wait times
DB Buffer Waits	Number of times a page within the area had to wait for a buffer page to become available and the total, highest, and average wait times
Shared Buffer Waits	Number of times transactions wanted to access a database page that was exclusively held by another transaction and the total, highest, and average wait times
Exclusive Buffer Waits	Number of times transactions waited for exclusive access to a database page and the total, highest, and average wait times

3.3.19 PMIRPT24: CDMSLIB detail report

PMIRPT24 contains detailed information about program load waits for a CDMSLIB during a specific interval.

Sample report:

REPORT NO. 24 CA-IDMS/PM 15.0 CAGJF0 DC SYSTEM VERSION #: 56	COMPUTER ASSOCIATES INTL. CDMSLIB DETAIL REPORT COMPUTER ASSOCIATES INTERNATIONAL, INC.	06/19/99 PAGE 1 DATA FROM: 6/19/99
--	---	---------------------------------------

INTERVAL	START TIME:14:58:16	END TIME: 15:00:00
CDMSLIB NAME: CDMSLIB		
--PGM LOAD WAITS--		
27	TOT WAITS	
1.128	TOT WAIT TIME	.0418 AVG WAIT TIME
.145	HIGHEST WAIT TIME	
INTERVAL	START TIME:15:00:00	END TIME: 15:10:00
CDMSLIB NAME: CDMSLIB		
--PGM LOAD WAITS--		
1	TOT WAITS	
.100	TOT WAIT TIME	.1001 AVG WAIT TIME
.100	HIGHEST WAIT TIME	
INTERVAL	START TIME:15:10:00	END TIME: 15:20:00
CDMSLIB NAME: CDMSLIB		
--PGM LOAD WAITS--		
14	TOT WAITS	
.618	TOT WAIT TIME	.0441 AVG WAIT TIME
.088	HIGHEST WAIT TIME	
INTERVAL	START TIME:15:20:00	END TIME: 15:30:00
CDMSLIB NAME: CDMSLIB		
--PGM LOAD WAITS--		
	TOT WAITS	
	TOT WAIT TIME	AVG WAIT TIME
	HIGHEST WAIT TIME	

PMIRPT24 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
End Time	Ending time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
CDMSLIB Name	Name of the CDMSLIB library
Pgm Load Waits	Number of program load waits and the total, highest, and average wait time

3.3.20 PMIRPT25: Journal detail report

PMIRPT25 contains detailed information about journal waits for each reported interval.

Sample report:

```

REPORT NO. 25                                COMPUTER ASSOCIATES INTL.                06/19/99 PAGE    3
CA-IDMS/PM 15.0   CAGJF0                    JOURNAL DETAIL REPORT
DC SYSTEM VERSION #: 56                    COMPUTER ASSOCIATES INTERNATIONAL, INC.  DATA FROM: 6/19/99

INTERVAL  START TIME: 15:00:00  END TIME: 15:10:00
JOURNAL NAME: J1JRNL                FILE:
JRNL PGSIZE
87500753 BEGIN RBN                    73741824 BLKS WRITTEN
640298176-END RBN                    BYTES WRITTEN
--BUFFER WAITS--                      --READ WAITS--
    TOT WAITS                          TOT WAITS
    TOT WAIT TIME                      TOT WAIT TIME
    HIGHEST WAIT TIME                  HIGHEST WAIT TIME
--JBEE WAITS--                          20893.000 HIGHEST WAIT TIME
    TOT WAITS                          --WRITE WAITS--
    TOT WAIT TIME                      TOT WAITS
    HIGHEST WAIT TIME                  TOT WAIT TIME
--JBC WAITS--                          HIGHEST WAIT TIME
    TOT WAITS                          TOT WAIT TIME
    TOT WAIT TIME                      AVG WAIT TIME
    HIGHEST WAIT TIME
INTERVAL  START TIME: 15:00:00  END TIME: 15:10:00
JOURNAL NAME: J2JRNL                FILE:
JRNL PGSIZE
87501009 BEGIN RBN                    73741824 BLKS WRITTEN
640298176-END RBN                    BYTES WRITTEN
--BUFFER WAITS--                      --READ WAITS--
    TOT WAITS                          TOT WAITS
    TOT WAIT TIME                      TOT WAIT TIME
    HIGHEST WAIT TIME                  HIGHEST WAIT TIME
--JBEE WAITS--                          20893.000 HIGHEST WAIT TIME
    TOT WAITS                          --WRITE WAITS--
    TOT WAIT TIME                      TOT WAITS
    HIGHEST WAIT TIME                  TOT WAIT TIME
--JBC WAITS--                          HIGHEST WAIT TIME
    TOT WAITS                          TOT WAIT TIME
    TOT WAIT TIME                      AVG WAIT TIME
    HIGHEST WAIT TIME

```

PMIRPT25 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
End Time	Ending time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Journal Name	Name of journal, as defined in the DMCL
File	Name of external file associated with the journal in the DMCL
Jrnl Pgsz	Page size defined for the journal
Begin RBN	Relative block number of the first block written to the journal during the interval
End RBN	Relative block number of the last block written to the journal during the interval
Blks Written	Number of blocks written to the journal
Bytes Written	Number of bytes written to the journal
Buffer Waits	Number of waits for the buffer (that is, buffer was requested but not available) and the total, highest, and average wait time
Read Waits	Number of physical read (rollback) I/Os against the journal that resulted in a wait and the total, highest, and average wait time
JBEE Waits	Number of waits for a journal buffer element ECB (JBEE) and the total, highest, and average wait time
Write Waits	Number of physical write I/Os against the journal that resulted in a wait and the total, highest, and average wait time
JBC Waits	Number of waits for a journal buffer control block and the total, highest, and average wait time

3.3.21 PMIRPT27: Program pool detail report

PMIRPT27 contains information about journal waits for each reported interval.

Sample report:

REPORT NO. 27		COMPUTER ASSOCIATES INTL.				06/19/99 PAGE 1	
CA-IDMS/PM 15.0 CAGJF0		PROGRAM POOL DETAIL REPORT					
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.				DATA FROM: 6/19/99	
INTERVAL	START TIME:15:00:00	END TIME: 15:10:00					
POOL TYPE: XA REENTRANT							
3788	POOL SIZE (K)	1583	IN USE (K)	1583	HIGH WATER (K)	21	SPACE LOADED (K)
1	PGM POOL LOADS	1	INTO UNALLOC SPACE		OVERLAY UNUSED PGM		OVERLAY PGM IN USE
--PGM LOAD WAITS--				-POOL SPACE WAITS-			
	TOT WAITS				TOT WAITS		
	TOT WAIT TIME		AVG WAIT TIME		TOT WAIT TIME		AVG WAIT TIME
	HIGHEST WAIT TIME				HIGHEST WAIT TIME		
INTERVAL	START TIME:15:00:00	END TIME: 15:10:00					
POOL TYPE: REENTRANT							
1364	POOL SIZE (K)	394	IN USE (K)	394	HIGH WATER (K)		SPACE LOADED (K)
	PGM POOL LOADS		INTO UNALLOC SPACE		OVERLAY UNUSED PGM		OVERLAY PGM IN USE
--PGM LOAD WAITS--				-POOL SPACE WAITS-			
	TOT WAITS				TOT WAITS		
	TOT WAIT TIME		AVG WAIT TIME		TOT WAIT TIME		AVG WAIT TIME
	HIGHEST WAIT TIME				HIGHEST WAIT TIME		
INTERVAL	START TIME:15:00:00	END TIME: 15:10:00					
POOL TYPE: PROGRAM							
500	POOL SIZE (K)	136	IN USE (K)	136	HIGH WATER (K)		SPACE LOADED (K)
	PGM POOL LOADS		INTO UNALLOC SPACE		OVERLAY UNUSED PGM		OVERLAY PGM IN USE
--PGM LOAD WAITS--				-POOL SPACE WAITS-			
	TOT WAITS				TOT WAITS		
	TOT WAIT TIME		AVG WAIT TIME		TOT WAIT TIME		AVG WAIT TIME
	HIGHEST WAIT TIME				HIGHEST WAIT TIME		

PMIRPT27 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
End Time	Ending time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Pool Type	Type of pool: program, XA program, reentrant, XA reentrant
Pool Size	Size of pool, in kilobytes
In Use	Kilobytes of storage occupied by programs at end of interval
High Water	Highest amount of storage used by programs since startup
Space Loaded	Kilobytes of storage used to load programs during the interval
Pgm Pool Loads	Number of programs loaded into the pool during the interval
Into Unalloc Space	Number of programs loaded into the pool during the interval without having to overlay other programs
Overlay Unused Pgm	Number of programs loaded into the pool during the interval that overlaid inactive programs
Overlay Pgm In Use	Number of programs loaded into the pool during the interval that overlaid active programs (this indicates a problem with either pool size or applications using the pool)
Pgm Load Waits	Total waits, total wait time, average wait time, and highest wait time for program load waits during the interval (averages should be as low as possible)
Pool Space Waits	Total waits, total wait time, average wait time, and highest wait time of an active task for an appropriate pool to become available during the interval (anything other than low numbers indicates a problem: expand the pool size or define heavily used programs as reentrant)

3.3.22 PMIRPT29: Storage type detail report

PMIRPT29 contains information about waits for specific storage types for each reported interval.

Sample report:

REPORT NO. 29	COMPUTER ASSOCIATES INTL.	06/19/99 PAGE 1
CA-IDMS/PM 15.0 CAGJF0	STORAGE TYPE DETAIL REPORT	
DC SYSTEM VERSION #: 56	COMPUTER ASSOCIATES INTERNATIONAL, INC.	DATA FROM: 6/19/99
INTERVAL START TIME:14:58:16 END TIME: 15:00:00		
STORAGE TYPE NON-XA		
-- SHARED STG WAITS --		--SHARED KEPT STG WAITS--
TOT WAITS		TOT WAITS
TOT WAIT TIME	AVG WAIT TIME	TOT WAIT TIME
HIGHEST WAIT TIME		HIGHEST WAIT TIME
-- USER STORAGE WAITS --		-- USER KEPT STG WAITS --
TOT WAITS		TOT WAITS
TOT WAIT TIME	AVG WAIT TIME	TOT WAIT TIME
HIGHEST WAIT TIME		HIGHEST WAIT TIME
-- TERMINAL STG WAITS --		-- DATABASE STG WAITS --
TOT WAITS		TOT WAITS
TOT WAIT TIME	AVG WAIT TIME	TOT WAIT TIME
HIGHEST WAIT TIME		HIGHEST WAIT TIME
-- SYSTEM STORAGE WAITS--		
TOT WAITS		
TOT WAIT TIME	AVG WAIT TIME	
HIGHEST WAIT TIME		
INTERVAL START TIME:14:58:16 END TIME: 15:00:00		
STORAGE TYPE XA		
-- SHARED STG WAITS --		--SHARED KEPT STG WAITS--
TOT WAITS		TOT WAITS
TOT WAIT TIME	AVG WAIT TIME	TOT WAIT TIME
HIGHEST WAIT TIME		HIGHEST WAIT TIME
-- USER STORAGE WAITS --		-- USER KEPT STG WAITS --
TOT WAITS		TOT WAITS
TOT WAIT TIME	AVG WAIT TIME	TOT WAIT TIME
HIGHEST WAIT TIME		HIGHEST WAIT TIME

PMIRPT29 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
End Time	Ending time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Storage Type	Indicates whether the storage is XA storage (above the 16-megabyte line (OS/390 and BS2000/OSD only)) or non-XA storage (below the 16-megabyte line)
Shared Stg Waits	Total waits, total wait time, average wait time, and highest wait time for shared storage (high average wait times can indicate a problem)
Shared Kept Stg Waits	Total waits, total wait time, average wait time, and highest wait time for shared kept storage (high average wait times can indicate a problem)
User Storage Waits	Total waits, total wait time, average wait time, and highest wait time for user storage (high average wait times can indicate a problem)
User Kept Stg Waits	Total waits, total wait time, average wait time, and highest wait time for user kept storage (high average wait times can indicate a problem)
Terminal Stg Waits	Total waits, total wait time, average wait time, and highest wait time for terminal storage (user tasks cannot explicitly access terminal storage)
Database Stg Waits	Total waits, total wait time, average wait time, and highest wait time for database storage (user tasks cannot explicitly access database storage)
System Storage Waits	Total waits, total wait time, average wait time, and highest wait time for system storage (user tasks cannot explicitly access system storage)

3.3.23 PMIRPT30: Interval statistics summary report

PMIRPT30 contains DC/UCF statistics for each reported interval.

Sample report:

START TIME	TASKS AT START	TASKS AT END	TASKS STARTD	TASKS ENDED	TASK ABENDS	TASK STALLS	TIMES MAX TASK	SYSTEM MODE CPU	USER MODE CPU	PGMS CALLED	PGMS LOADED	GET STG RQSTS	FREE STG RQSTS	DC SRVCE RQSTS	DB SRVCE RQSTS
14:58:16	0	20	38	18				1.1863		110	146	932	682	233	637
15:00:00	20	21	1							1	1	263	253	838	6
15:10:00	21	21	16	16				.2044		75	13	422	418	1015	77
15:20:00	21	21										252	252	840	
15:30:00	21	20	74	75				2.4261		1619	73	4673	4585	20576	9145
15:40:00	20	22	166	164				2.8533		2917	108	5138	4910	16355	14696
15:50:00	22	21	31	32	2			5.7315		335	22	1313	1220	7716	6642
16:00:00	21	22	2	1				.0177		23	2	303	281	2639	1326
16:10:00	22	22	22	22	1			11.9189		182		732	717	13959	11009
16:20:00	22	21	17	18				2.4330		163	1	645	630	15592	13681
16:30:00	21	22	49	48	1			14.2816		310	10	1118	1091	5026	4635
16:40:00	22	20	87	89				.4032		550	3	1135	1122	1585	501
16:50:00	20	20	53	53				.2606		328	11	742	753	1098	304

PMIRPT30 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Tasks at Start	Number of tasks active at the beginning of the interval
Tasks at End	Number of tasks active at the end of the interval
Tasks Startd	Number of tasks that started during the interval
Tasks Ended	Number of tasks that ended during the interval
Task Abends	Number of tasks that ended abnormally during the interval
Task Stalls	Number of tasks that timed out during the interval
Times Max Task	The number of times during the interval that a maximum tasks condition existed
System Mode CPU	Amount of time during the interval that the DC/UCF system spent performing system services on behalf of tasks

3.3 Report samples

Field	Description
User Mode CPU	Amount of time during the interval that user tasks spent in execution
Pgms Called	Number of programs called by tasks during the interval; includes: <ul style="list-style-type: none">■ LINKs■ XCTLs■ Programs called by the DC/UCF system on behalf of the task
Pgms Loaded	Number of programs called during the interval that were not present in the program pool and that needed to be loaded
Get Stg Rqsts	Number of GET STORAGE (#GETSTG) requests issued during the interval
Free Stg Rqsts	Number of FREE STORAGE (#FREESTG) requests issued during the interval
DC Srvce Rqsts	Number of requests for DC/UCF services issued during the interval
DB Srvce Rqsts	Number of requests for database services issued during the interval

3.3.24 PMIRPT32: Run unit statistics summary report

PMIRPT32 contains database statistics for each reported interval. The report shows one column of information for each interval.

Sample report:

REPORT NO. 32		COMPUTER ASSOCIATES INTL.										06/19/99 PAGE		1	
CA-IDMS/PM 15.0 CAGJF0		RUNUNIT STATISTICS SUMMARY REPORT										DATA FROM: 6/19/99			
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.													
START TIME	R/U AT STRT	R/U AT END	NUM R/U STRTD	NUM R/U ENDED NORMAL	NUM DBMS CALLS	RECS RQSTD	RECS CURR OF R/U	PAGES RQSTD	PAGES READ	PAGES WRITTEN	CALC RECS NO OFLOW	CALC RECS WITH OFLOW	VIA RECS NO OFLOW	VIA RECS WITH OFLOW	FRAGS STORED
14:58:16	0	11	43	32	727	571	202	2312	2078						
15:00:00	11	11			7	13	2	10	4						
15:10:00	11	11			102	49	7	42	6						
15:20:00	11	11													
15:30:00	11	11	750	750	10078	5749	2771	4104	756						
15:40:00	11	12	466	465	14805	11163	6462	8131	1379	26	13		39		
15:50:00	12	11	75	73	7499	7333	6141	10931	8331	22	10		30		
16:00:00	11	12	4	3	38	6		6							
16:10:00	12	12	39	37	11860	15916	11393	12269	12056						
16:20:00	12	12	47	47	2308	3067	1852	1997	1916						
16:30:00	12	11	99	99	16710	19701	15749	19559	19237						
16:40:00	11	11	24	24	665	170	8	159	15	1	1		4		
16:50:00	11	11			403	145	11	124	23						

PMIRPT32 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
R/U At Strt	Number of run units active at the start of the interval
R/U At End	Number of run units active at the end of the interval
Num R/U Strtd	Number of run units started during the interval
Num R/U Ended Normal	Number of run units ended during the interval
Num DBMS Calls	Number of times DBMS was called
Recs Rqstd	Number of records retrieved from the database as a result of run unit processing requests
Recs Curr of R/U	Number of records that became current of the run unit during the interval as the result of FIND, STORE, or OBTAIN requests

Field	Description
Pages Rqstd	Number of pages requested by the DBMS (difference of Pages Rqstd and Pages Read in the number of pages found in the buffer)
Pages Read	Number of pages physically read on behalf of run units during the interval
Pages Written	Number of physical writes that occurred while this run unit was in control; because IDMSDBIO writes pages as they are placed in the buffer, physical writes can occur for a program READYed in retrieval mode
CALC Recs No Oflow	Number of new records stored during the interval that fit on the target page using the CALC location method
CALC Recs With Oflow	Number of new records stored during the interval using the CALC location method that were placed on a page other than the target page
VIA Recs No Oflow	Number of new records stored during the interval that fit on the target page when using the VIA location method
VIA Recs With Oflow	Number of new records stored during the interval using the VIA location method that were placed on a page other than the target page
Fraggs Stored	Number of record fragments that were stored during the interval

3.3.25 PMIRPT38: Journal block full detail report

PMIRPT38 contains detailed information about the number of journal blocks written for a report interval.

Sample report:

REPORT NO. 38		COMPUTER ASSOCIATES INTL.										06/19/99	PAGE 1
CA-IDMS/PM 15.0 CAGJF0		JOURNAL BLOCK FULL DETAIL REPORT										DATA FROM: 6/19/99	
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.											
START TIME		0-10 PCT FULL	11-20 PCT FULL	21-30 PCT FULL	31-40 PCT FULL	40-50 PCT FULL	50-60 PCT FULL	60-70 PCT FULL	70-80 PCT FULL	80-90 PCT FULL	90-100 PCT FULL	TOTAL BLKS WRITN	
14:58:16	BLKS WRITTEN	0	0	0	0	0	0	0	0	0	0	0	
	PCT OF TOTAL CUMULATIVE												
15:00:00	BLKS WRITTEN	0	0	0	0	0	0	0	0	0	0	0	
	PCT OF TOTAL CUMULATIVE												
15:10:00	BLKS WRITTEN	0	0	0	0	0	0	0	0	0	0	0	
	PCT OF TOTAL CUMULATIVE												
15:20:00	BLKS WRITTEN	0	0	0	0	0	0	0	0	0	0	0	
	PCT OF TOTAL CUMULATIVE												
15:30:00	BLKS WRITTEN	0	0	0	0	0	0	0	0	0	0	0	
	PCT OF TOTAL CUMULATIVE												
15:40:00	BLKS WRITTEN	0	27	0	12	0	2	0	0	0	13	54	
	PCT OF TOTAL CUMULATIVE		50.0		22.2		3.7				24.1	100	
			50.0	50.0	72.2	72.2	75.9	75.9	75.9	75.9	100.0	100	
15:50:00	BLKS WRITTEN	0	23	0	9	0	2	0	0	0	10	44	
	PCT OF TOTAL CUMULATIVE		52.3		20.5		4.5				22.7	100	
			52.3	52.3	72.7	72.7	77.3	77.3	77.3	77.3	100.0	100	
16:00:00	BLKS WRITTEN	0	0	0	0	0	0	0	0	0	0	0	
	PCT OF TOTAL CUMULATIVE												
16:10:00	BLKS WRITTEN	0	0	0	0	0	0	0	0	0	0	0	
	PCT OF TOTAL CUMULATIVE												
16:20:00	BLKS WRITTEN	0	0	0	0	0	0	0	0	0	0	0	
	PCT OF TOTAL CUMULATIVE												

PMIRPT38 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
Blks Written	Number of journal blocks that were written from the buffer during the interval; each column indicates the number of blocks that were 0-10% full, 11-20% full, and so on
Pct of Total	Percent of the total number of blocks written that were 0-10% full, 11-20% full, and so on
Cumulative	Cumulative percentage of blocks written in order of percent full; for example, 60.3% of the journal blocks written were 30% full or less
Total Blks Writn	Total number of journal blocks written for the interval

3.3.26 PMIRPT40: Data sharing SYSPLEX detail report

PMIRPT40 contains detailed information about the use of SYSPLEX resources when exploiting data sharing.

Sample report:

REPORT NO. 40	COMPUTER ASSOCIATES INTL.		10/20/00 PAGE				
CA-IDMS/PM 15.0 CAGJF0	DATA SHARING SYSPLX DETAIL REPORT						
DC SYSTEM VERSION #: 74	COMPUTER ASSOCIATES INTERNATIONAL, INC.		DATA FROM: 4/05/00				
INTERVAL START TIME: 8:48:11 END TIME: 8:50:00							
XES Lock statistics for CAIDMSDBDCGRP1LK							
Resource Type	--Obtains--	--Alters---	-Releases--	---Waits---	Cumulative	Average	
LmgrResource	0	0	0	0	.0000	.0000	
Phys.Page Lk	0	0	0	0	.0000	.0000	
GlobalDeadLk	0	0	0	0	.0000	.0000	
LmgrProxy Lk	0	0	0	0	.0000	.0000	
EnqDeq. Lock	0	0	0	0	.0000	.0000	
AreaList Lk	3	0	3	0	.0000	.0000	
FileList Lk	12	0	12	0	.0000	.0000	
Global Queue	0	0	0	0	.0000	.0000	
INTERVAL START TIME: 8:48:11 END TIME: 8:50:00							
XES List statistics for CAIDMSDBDCGRP1LI							
List Name	---Reads---	---Writes---	--Deletes--	---Waits---	----- Wait Time -----	Cumulative	Average
Area List	15	8	0	21		.0125	.0006
File List	25	20	0	44		.0590	.0013
Queue List	0	0	0	0		.0000	.0000
INTERVAL START TIME: 8:48:11 END TIME: 8:50:00							
Statistics for group DBDCGRP1 member SYSTEM74							
Message Type	---Sends---	-Receives--					
Reply Msg	0	0					
Test Msg	0	0					
Sync.Stamp	0	0					
GlobalDeadLk	0	0					
DCMTDCUFSEND	0	0					
AreaFileVal	0	0					
Queue Msg	0	0					
Program Msg	0	0					
INTERVAL START TIME: 8:48:11 END TIME: 8:50:00							
Statistics for group DBDCGRP1 member SYSTEM73							
Message Type	---Sends---	-Receives--					
Reply Msg	2	0					
Test Msg	0	0					
Sync.Stamp	0	0					
GlobalDeadLk	0	0					
DCMTDCUFSEND	0	0					
AreaFileVal	0	2					
Queue Msg	0	0					
Program Msg	0	0					

PMIRPT40 fields

Field	Description
Start Time	Starting time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)
End Time	Ending time for the interval on a 24-hour clock (<i>hh:mm:ss</i>)

XES lock statistics: The table below describes the fields that contain information about the usage of XES lock structure *strname*.

Field	Description
Resource Type	Type of resource for which XES lock requests were issued: LmgrResource Lock manager resources (e.g. DBKeys) Phys.Page Lk DBIO buffer page locks GlobalDead Lk Deadlock manager locks LmgrProxy Lk Lock manager proxy locks EnqDeq. Lock Locks for global ENQ/DEQ processing AreaList Lk Locks associated with keeping track of areas that are shared FileList Lk Locks associated with keeping track of files that are shared Global Queue Locks for global queue area processing
Obtains	Total number of obtains done for the resource type
Alters	Total number of alters done for the resource type
Releases	Total number of releases done for the resource type
Waits	Total number of waits
Cumulative Wait Time	Total amount of time spent waiting for XES lock requests
Average Wait Time	Average amount of time spent waiting for XES lock requests

XES list statistics: The table below describes the fields that contain information about the usage of XES list structure *strname*.

Field	Description
List Name	The internal name of the list: Area List Keeps track of areas that are shared File List Keeps track of files that are shared Queue List Keeps track of global queues
Reads	Total number of reads done on the list
Writes	Total number of writes done on the list
Deletes	Total number of deletes done on the list
Waits	Total number of waits
Cumulative Wait Time	Total amount of time spent waiting for XES list requests
Average Wait Time	Average amount of time spent waiting for XES list requests

Group member statistics: The table below describes the fields that contain information about the usage of this DC system of XCF group *grpname* for member *memname*.

Field	Description
Message Type	The internal name of the message:
	<p>Reply Msg A reply to one of the other message types</p> <p>Test Msg Message type used for testing purposes</p> <p>Sync. Stamp Message type used for invalidating the cache for SQL catalogs</p> <p>GlobalDead Lk Deadlock manager messages</p> <p>DCMTDCUFSEND Messages sent on behalf of a broadcasted DCMT, DCUF or SEND</p> <p>AreaFileVal Message type used for informing data sharing members of shared files and areas</p> <p>Queue Msg Message type used for informing data sharing members of shared queues</p> <p>Program Msg Message type used for informing data sharing members of automatic program invalidation</p>
Sends	Total number of sends done for the message type
Receives	Total number of receives done for the message type

3.3.27 PMIRPT90: Machine-readable copy

Statistics extracted by Report 00, output to either a tape or disk.

When you run PMIRPT90, you must run it with PMIRPT00. Additionally, you can use the following task parameters with PMIRPT90:

- CV NUMBER
- DATE FORMAT
- REPORT FROM/THRU

3.3.28 PMIRPT99: Input processing summary report

PMIRPT99 contains information on:

- **Interval selection parameters**; for more information, see 3.2, “Requesting reports” on page 3-5 earlier in this chapter
- **Input card processing**
- **Input record processing statistics:**
 - Records read by PMIRPT00
 - Records selected by PMIRPT00
 - Records dropped by PMIRPT00

For example, this category includes the earliest record read, the latest record read, and the different record types read.

- **Processing of multipart records**; task wait type and interval type records take up more than one DC/UCF log record

3.3 Report samples

Sample report:

REPORT NO. 99 CA-IDMS/PM 15.0	CAGJF0	COMPUTER ASSOCIATES INTL. INPUT PROCESSING SUMMARY REPORT COMPUTER ASSOCIATES INTERNATIONAL, INC.	21/10/99 PAGE 1
DATE FORMAT: DMY			

INPUT CARD PROCESSING			
CARDS READ:	1		
CARDS PROCESSED:	1		
COMMENT CARDS:	0		
CARD ERRORS:	0		
INPUT RECORD PROCESSING STATISTICS			
RECORDS READ BY PMIRPT00			
# STAT RECS READ:	4,467		
# PMAM RECS READ:	4,179		
# PMIM RECS READ:	288		
EARLIEST REC READ:	07:54	ON 30/09/99	(99/274)
LATEST REC READ:	08:10	ON 30/09/99	(99/274)
BY RECORD TYPE			
AREA WAITS	204		
BUFFER WAITS	12		
CDMSLIB WAITS	3		
INTERVAL STATS	3		
INTERVAL WAITS	6		
JOURNAL WAITS	12		
LINE WAITS	15		
PGMPool WAITS	12		
RUNUNIT STATS	3		
STGPOOL STATS	9		
STG TYPE WAITS	6		
DBGROUP WAITS	3		
RECORDS SELECTED BY PMIRPT00			

REPORT NO. 99		COMPUTER ASSOCIATES INTL.	21/10/99	PAGE	2
CA-IDMS/PM 15.0	CAGJF0	INPUT PROCESSING SUMMARY REPORT			
		COMPUTER ASSOCIATES INTERNATIONAL, INC.			
# PMIM RECS SELECTED:	186				
EARLIEST REC SELECTD:	07:54	ON 30/09/99	(99/274)		
LATEST REC SELECTED:	08:10	ON 30/09/99	(99/274)		
BY RECORD TYPE					
AREA WAITS	102				
BUFFER WAITS	12				
CDMSLIB WAITS	3				
INTERVAL STATS	3				
INTERVAL WAITS	6				
JOURNAL WAITS	12				
LINE WAITS	15				
PGMPPOOL WAITS	12				
RUNUNIT STATS	3				
STGPOOL STATS	9				
STG TYPE WAITS	6				
DBGROUP WAITS	3				
RECORDS DROPPED BY PMIRPT00					
# PMAM RECS DROPPED:	4,179				
# PMIM RECS DROPPED:	0				
PROCESSING OF MULTIPART RECORDS					
#PMINTDS SEQ# 1:	3				
#PMINTDS SEQ# 2:	3				

Chapter 4. Application Monitor Batch Reports

4.1 Overview	4-3
4.2 Requesting reports	4-5
4.2.1 Selection criteria parameters	4-5
4.2.1.1 Syntax	4-6
4.2.1.2 Parameters	4-8
4.2.1.3 Examples	4-11
4.2.2 Report selection parameters	4-12
4.2.2.1 Syntax	4-12
4.2.2.2 Parameters	4-12
4.2.2.3 Examples	4-14
4.3 Report samples	4-15
4.3.1 PMARPT01: Task detail report	4-15
4.3.2 PMARPT02: Task summary report	4-17
4.3.3 PMARPT03: CA-ADS dialog detail report	4-20
4.3.4 PMARPT04: CA-ADS dialog summary report	4-21
4.3.5 PMARPT05: User detail report	4-21
4.3.6 PMARPT06: User summary report	4-24
4.3.7 PMARPT07: Billing group detail report	4-25
4.3.8 PMARPT08: Billing group summary report	4-27
4.3.9 PMARPT09: Abnormal termination detail report	4-29
4.3.10 PMARPT10: Abnormal termination summary report	4-30
4.3.11 PMARPT11: LTERM detail report	4-31
4.3.12 PMARPT12: LTERM summary report	4-32
4.3.13 PMARPT13: PTERM detail report	4-33
4.3.14 PMARPT14: PTERM summary report	4-34
4.3.15 PMARPT15: System detail report	4-35
4.3.16 PMARPT16: System summary report	4-36
4.3.17 PMARPT17: Database detail report	4-36
4.3.18 PMARPT18: Database summary report	4-39
4.3.19 PMARPT19: DC statistics detail report	4-40
4.3.20 PMARPT20: DC statistics summary report	4-42
4.3.21 PMARPT31: Task wait summary report	4-44
4.3.22 PMARPT36: Task wait detail report	4-46
4.3.23 PMARPT80: Load balancing report (by day and central version)	4-49
4.3.24 PMARPT81: Load balancing (by CV)	4-50
4.3.25 PMARPT82: Load balancing (All CVs)	4-51
4.3.26 PMARPT90: Machine-readable copy	4-51
4.3.27 PMARPT97: Summary recap report	4-52
4.3.28 PMARPT99: Input processing summary report	4-53

4.1 Overview

You can use Application Monitor reports to:

- Track system utilization
- Perform trend analysis

You use a standard CULPRIT job stream to run Application Monitor reports. The report definitions are stored in the data dictionary. You can specify selection criteria to provide maximum control over the information printed.

The reporting component of the Application Monitor can also produce a machine-readable output file.

The first section in this chapter describes how to request Application Monitor reports. The remainder of the chapter contains a description of each of the numbered reports listed in the table below.

Report	Title/description
00	Extract and housekeeping routines (used internally)
PMNAME	Site or user name to appear in report-heading lines
01	Task Detail Report
02	Task Summary Report
03	CA-ADS Dialog Detail Report
04	CA-ADS Dialog Summary Report
05	User Detail Report
06	User Summary Report
07	Billing Group Detail Report
08	Billing Group Summary Report
09	Abnormal Termination Detail Report
10	Abnormal Termination Summary Report
11	LTERM Detail Report
12	LTERM Summary Report
13	PTERM Detail Report
14	PTERM Summary Report
15	System Detail Report
16	System Summary Report
17	Database Detail Report
18	Database Summary Report
19	DC Statistics Detail Report
20	DC Statistics Summary Report
31	Task Wait Summary Report
36	Task Wait Detail Report
80	Load Balancing Report (By Day and Central Version)
81	Load Balancing Report (By Central Version)
82	Load Balancing Report (By All Central Version)
90	Machine-readable output file containing the extracted statistics (in tape or disk format)
97	Summary Recap Report
99	Input Processing Summary Report

4.2 Requesting reports

You request Application Monitor reports using a CULPRIT job stream. The job control language you need to run the reports is shown in Chapter 2, “Preparing to Run Reports” on page 2-1. In the job stream, you supply:

- Selection criteria parameters — for including and/or excluding specific information from the reports
- Report specification parameters — for specifying the dictionary to use, formatting options, and the appropriate report names

You can request any or all of the reports in a single run.

General rules for parameter input

- Every parameter is optional.
- Include any or all of these parameters in a single run.
- Use a single line for each separate parameter.
- If you specify more than one parameter, *all* conditions that you specify must be met in order for you to select a task for reporting.
- Use columns 1 through 72. Input beyond column 72 is ignored. No error is flagged (unless a quoted description is truncated).
- An asterisk (*) in column 1 indicates a comment line.
- Specify either the 3-letter abbreviation or the whole word. For example, PROGRA is invalid. The syntax rules indicate (in uppercase characters) any other allowable abbreviations or synonyms.
- Blank lines are ignored but generate a warning message.

4.2.1 Selection criteria parameters

Include selection criteria parameters in your CULPRIT JCL to include information in or exclude information from your Performance Monitor reports.

Parameters apply to all reports in a run: Selection criteria parameters apply to all of the reports you request in the same run. For example, if your selection criteria specifies reporting only for tasks within a certain time period, that time period is used for all of the reports in the run.

Positioning selection criteria parameters: Position selection criteria parameters in the JCL stream as follows:

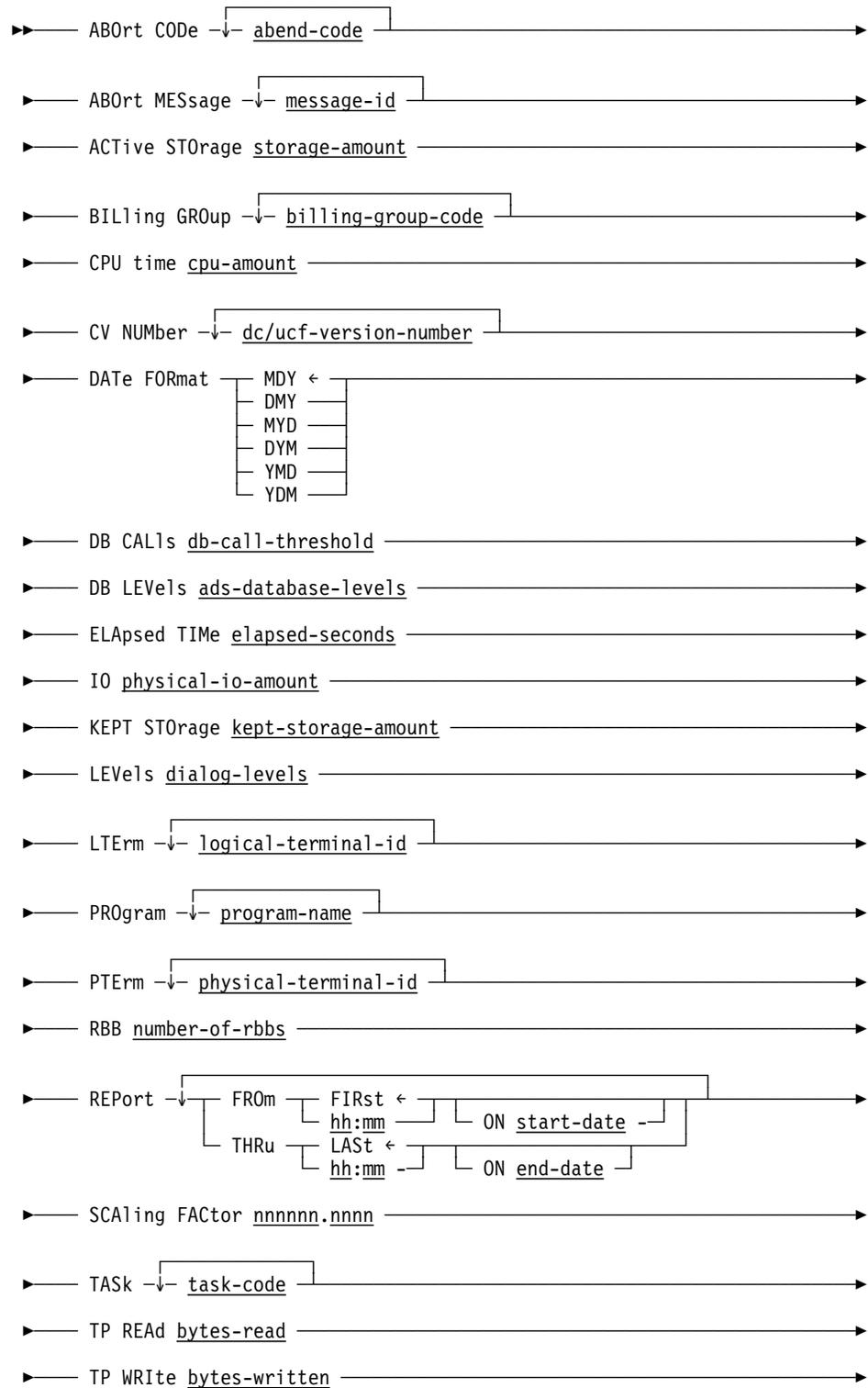
System	Position in JCL
OS/390	Following the //SYS010 DD * statement
VSE/ESA	Following the /* in the EXEC CULPRIT step
VM/ESA	In the SYS010 file
BS2000/OSD	In the SYS010 file

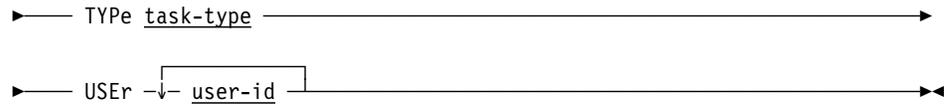
When you don't need selection parameters: If you don't need selection parameters for the run, then for:

- OS/390 — Use //SYS010 DD DUMMY
- VSE/ESA — Leave out the parameters
- VM/ESA — Use SYS010 DUMMY
- BS2000/OSD — Use /ADD-FILE-LINK L-NAME=SYS010,F-NAME=*DUMMY

4.2.1.1 Syntax

Application Monitor selection criteria syntax and parameter descriptions follow. Interpret the word *task* to mean either task or CA-ADS dialog, as appropriate. You can omit leading zeros where syntax uses a number, unless otherwise noted.





4.2.1.2 Parameters

ABOrt CODE abend-code

Selects only those tasks that abended with the (4-character) database/data communications task abend code specified. *Abend-code* is a 4-character database/data communications abend code. You can specify up to 20 codes. The abbreviation ABRT is permitted.

ABOrt MESsage message-id

Selects only those tasks that abended with the DC/UCF error message ID specified (6 digits, excluding the severity code suffix). *Message-id* is the six-digit DC/UCF message ID. You can select up to 20 IDs. The abbreviations ABRT and MSG are permitted.

ACTive STOrage storage-amount

Selects only those tasks that used more than the specified number of bytes of main memory from a storage pool during active execution. You can use the abbreviation STG.

BILling GROup billing-group-code

Selects tasks by billing-group code. *Billing-group-code* is a 1- to 12-character billing-group code. Use single quotes if it contains embedded spaces. Use two quotation marks to indicate a quotation mark that is part of the description. Up to 20 codes are permitted. You can use the abbreviation GRP.

CPU time cpu-amount

Selects only those tasks that used more than *nnnn.nnnn* seconds of CPU time. *Cpu-amount* is a number between .0001 and 999999.9999.

CV NUMBER dc/ucf-version-number

Selects only those tasks that ran under the specified DC/UCF system. *Dc/ucf-version-number* is a number between 0 and 9999. You can place multiple values on one line and you can use the abbreviation NBR. Up to 20 CV numbers are permitted.

DATE FORMat MDY/DMY/MYD/DYM/YMD/YDM

Specifies the date format that appears on the reports. The default is MDY. You can use the abbreviation FMT.

DB CALLs database-call-threshold

Selects only those tasks that issued more than the specified number of database calls. Synonyms you can use are DB and DBCALLS.

DB LEVels ads-database-levels

Selects only those CA-ADS dialogs that issued database calls from more than the specified number of application-thread levels. Non CA-ADS tasks are dropped. You can use the abbreviation LVLS.

ELapsed TIME elapsed-seconds

Selects only those tasks with an elapsed time longer than the specified number of seconds. The elapsed time is a number between .0001 and 9999.9999 and is the internal CA-IDMS response time, and it is measured from task initiation to task termination within the DC/UCF system.

IO physical-io-amount

Selects only those tasks that issued more than the specified number of physical disk I/Os.

KEPt STOrage kept-storage-amount

Selects only those tasks that kept more than the specified number of bytes of main memory from a storage pool after task termination (across a pseudo-converse). You can use the abbreviation STG.

LEVels dialog-levels

Selects only those CA-ADS dialogs that processed more than the specified number of levels in the application thread. Non CA-ADS tasks are dropped. You can use the abbreviation LVLS.

LTErm logical-terminal-id

Selects only tasks initiated from the logical terminal specified. *Logical-terminal-id* is a 1- to 8-character logical terminal ID. Up to 50 IDs are permitted.

PROgram program-name

Selects only those tasks that execute the named program at the first level. *Program-name* is a 1- to 8-character program name. Up to 50 program names are permitted. You can use the abbreviations PROG and PGM.

PTerm physical-terminal-id

Selects only tasks initiated from the physical terminal specified. *Physical-terminal-id* is a 1- to 8-character physical terminal ID. Up to 50 IDs are permitted.

RBB number-of-rbbs

Selects only those CA-ADS dialogs that obtained more than the specified number of record buffer blocks. Non CA-ADS tasks are dropped.

REPort FROM/THRU

Selects intervals to be included in the report. If you want to report on the entire input file, don't include this parameter. You can specify this parameter once per run, and you must specify at least one FROM **or** one THRU. The default is FROM 00:00 ON 00/001 THRU 24:00 ON 99/365.

Regarding the time specification:

- Specify the time as *hh:mm* or *hhmm* (00:00 through 24:00).
- Times include the entire minute. For example, THRU 14:34 means up to 14:34:59.9999.
- Times must include the leading 0. For example, 09:00 is valid, but 9:00 is not.
- If you specify a time range, the FROM time must be earlier than the THRU time.

Regarding the date specification:

- Julian: *yy/ddd*
- Gregorian: as specified by DATE FORMAT
- The FROM date must be earlier or matching the THRU date.
- Slashes are optional in date specifications.

SCALing FACtor nnnnnn.nnnn

Defines a scaling factor for report graphs. *Nnnnnn.nnnn* is a numeric value that specifies the scaling factor (for example, .01 results in scaling of data in hundredths). The decimal point is not required and, if present, can be leading or trailing. Any more than 4 digits to the right of the decimal point are truncated. For example, 1.2345678 will be truncated to 1.2345. The default is 1.0. You can use the synonym SCALE FACTOR. About the values you can specify:

- 0 is invalid.
- The maximum is 999999.9999.
- Examples of valid values follow:

123456	.3456
1234.5678	45.
000000.01	0.3

TASK task-code

Selects only tasks with the task code or (for CA-ADS) dialog name specified. *Task-code* is a 1- to 8-character task code or dialog name. Up to 50 task codes are permitted.

TP REAd bytes-read

Selects only those tasks that read in more than the specified number of bytes from the terminal.

TP WRItE bytes-written

Selects only those tasks that wrote out more than the specified number of bytes to the terminal.

TYPE task-type

Selects only tasks of the type specified. Possible values for *task-type* are shown in the following table.

Task-type	Meaning
ADS/O	DC task whose first-level program language is the CA-ADS process language
ASSEM	DC task whose first-level language is Assembler
COBOL	DC task whose first-level language is COBOL
PL/I	DC task whose first-level language is PL/I
CICS	CICS task
TPMON	Task initiated through a TP monitor other than CICS or a DC/UCF system
BATCH	Batch ERUS
ERUS	ERUS when PERFMON=NO is specified in the CA-IDMS operating-system-specific SVC macro
SYSTEM	DC/UCF system internal task
UNDEF	Undefined

USER *user-id*

Selects only those tasks invoked by the specified user. *User-id* is a 1- to 8-character user ID. Use quotes if it contains embedded spaces. Use two quotation marks to indicate a quotation mark that is part of *user-id*.

Up to 20 user IDs are permitted. You can use the synonym USERID.

4.2.1.3 Examples

The parameters below select only those tasks for which the first-level program was written in CA-ADS or COBOL that ran on June 6, 1999, during prime time (between 9 a.m. and 5 p.m.), and that used more than 2.5 seconds of CPU time.

```
TYPE          ADS/O
TYPE          COBOL
FROM 09:00 ON 99157 THRU 17:00 ON 99157
CPU TIME     2.5000
```

The parameters below select only those executions of tasks CSFDURLJ and CSFDUMVJ that issued more than 30 database calls and that abended with DC/UCF task abend code D004 (indicating that the task took more CPU time than was allowed). No time or date parameters are specified, so the entire period represented by the input file is considered.

```
TASK          CSFDURLJ
TASK          CSFDUMVJ
ABORT CODE    D004
DB CALLS      30
```

4.2.2 Report selection parameters

Report selection parameters define:

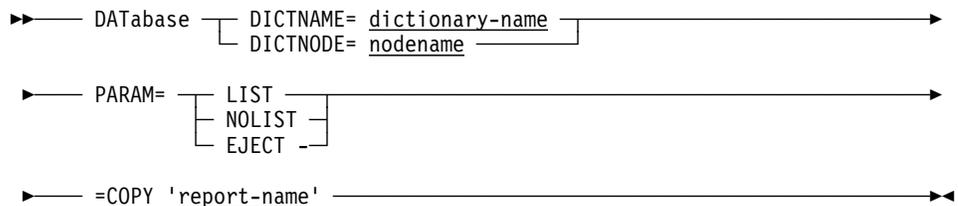
- The dictionary that contains the report definitions
- Whether to print CULPRIT parameters
- Which reports to produce

Positioning report selection parameters: Position report selection parameters in the report-request JCL stream, using one line for each parameter:

System	Position in JCL
OS/390	Following the //SYSIN DD * statement
VSE/ESA	Following the EXEC CULPRIT statement
VM/ESA	Following the DATABASE statement
BS2000/OSD	In the SYSDTA system file; the corresponding filename is passed to the JCL procedure via the INPF symbolic parameter

Syntax and parameter descriptions for report selection parameters follow.

4.2.2.1 Syntax



4.2.2.2 Parameters

DATABASE

Defines the data dictionary that contains the report definitions (DICTNAME option) or the node that controls the dictionary (DICTNODE option). Start this parameter in column 2.

PARAM=LIST/NOLIST/EJECT

Controls printing of the CULPRIT Sequential Input Parameter List:

- LIST (default) prints all parameters
- NOLIST prints no parameters
- EJECT starts each new listing at the top of a new page

Start this parameter in column 2.

=COPY 'report-name'

Requests the named report; begin =COPY in column 1; you can repeat the parameter any number of times. *Report-name* must be enclosed in quotes. Acceptable values for *report-name* are given in the following table.

Value for report-name	Meaning
PMARPT00	Performs housekeeping functions and extracts statistics for input to other reports; required, but not an output report
PMNAME	Supply the user site or company name to be printed in the heading of each report; required, but not an output report
PMARPT99	List an input processing summary based on the selection criteria specified
PMARPT nn	Produce the report defined by the number (nn) specified: <ul style="list-style-type: none"> 01 Task Detail Report 02 Task Summary Report 03 CA-ADS Dialog Detail Report 04 CA-ADS Dialog Summary Report 05 User Detail Report 06 User Summary Report 07 Billing Group Detail Report 08 Billing Group Summary Report 09 Abnormal Termination Detail Report 10 Abnormal Termination Summary Report 11 LTERM Detail Report 12 LTERM Summary Report 13 PTERM Detail Report 14 PTERM Summary Report 15 System Detail Report 16 System Summary Report 17 Database Detail Report 18 Database Summary Report 19 DC Detail Report 20 DC Summary Report 31 Task Wait Summary Report 36 Task Wait Detail Report 80 Load Balancing Report (by day and central version) 81 Load Balancing Report (by day) 82 Load Balancing Report (all central versions) 90 Machine-readable copy of the extracted statistics, output either to tape or disk 97 Summary Recap Report

4.2.2.3 Examples

The following parameters select all printed reports. The CULPRIT report definitions are stored in the DICTCAS dictionary (DATABASE DICTNAME=DICTCAS). The report source (PARAM=NOLIST) is not printed.

```
DATABASE DICTNAME=DICTCAS
PARAM=NOLIST
=COPY 'PMARPT00'
=COPY 'PMNAME'
=COPY 'PMARPT99'
=COPY 'PMARPT01'
=COPY 'PMARPT02'
=COPY 'PMARPT03'
=COPY 'PMARPT04'
=COPY 'PMARPT05'
=COPY 'PMARPT06'
=COPY 'PMARPT07'
=COPY 'PMARPT08'
=COPY 'PMARPT09'
=COPY 'PMARPT10'
=COPY 'PMARPT11'
=COPY 'PMARPT12'
=COPY 'PMARPT13'
=COPY 'PMARPT14'
=COPY 'PMARPT15'
=COPY 'PMARPT16'
=COPY 'PMARPT17'
=COPY 'PMARPT18'
=COPY 'PMARPT19'
=COPY 'PMARPT20'
=COPY 'PMARPT80'
=COPY 'PMARPT81'
=COPY 'PMARPT82'
=COPY 'PMARPT97'
```

The parameters below request all summary reports, as well as a CULPRIT source listing for each report. The site uses only one dictionary, so there is no DATABASE parameter.

```
PARAM=LIST
=COPY 'PMARPT00'
=COPY 'PMNAME'
=COPY 'PMARPT99'
=COPY 'PMARPT02'
=COPY 'PMARPT04'
=COPY 'PMARPT06'
=COPY 'PMARPT08'
=COPY 'PMARPT10'
=COPY 'PMARPT12'
=COPY 'PMARPT14'
=COPY 'PMARPT16'
=COPY 'PMARPT18'
=COPY 'PMARPT20'
```

4.3 Report samples

The remainder of this chapter describes each report.

Required reports: These two required reports have no output:

- **PMARPT00** — Reads the input (archive) tape and formats it into global data fields; the data fields provide the input for all other reports
- **PMNAME** — Reads the PMNAME module and inserts its contents into a global field called COMPANY-NAME; this produces the heading for each report

Optional reports: The remaining optional reports for the Interval Monitor are described in numeric order. Each report description includes:

- An overview description
- A sample listing
- A description of the fields in the report

4.3.1 PMARPT01: Task detail report

PMARPT01 contains one detail line for every execution of each task reported. With CA-ADS, it contains one detail line for every execution of each dialog. In the descriptions below, the word *task* should be interpreted as meaning either task or CA-ADS dialog, as appropriate to the task type displayed.

4.3 Report samples

Sample report:

REPORT NO. 01		CA-IDMS/PM 15.0		CAGJF0	COMPUTER ASSOCIATES INTL.				30/09/99		PAGE 1				
DC SYSTEM VERSION #: 71				COMPUTER ASSOCIATES INTERNATIONAL, INC.				DATA FROM: 30/09/99							
TASK CODE	VER NUM	TASK NUM	TASK TYPE C	START TIME	STORAGE ACQUIRED	STORAGE KEPT	CPU TIME (SECS)	WAIT TIME (SECS)	TP READ LNGLTH	TP WRITE LNGLTH	NUM OF I/O	NUM OF DBCLS	NUM OF LVL5	NUM OF DBLVLS	NUM OF BUF5
QUED	0	18	ASSEM	7:54:11	5760	0	.8927	4.5380	0	0	1002	26	--	--	--
CLOD	0	19	ASSEM	7:54:11	13056	0	.0552	.3059	0	0	10	94	--	--	--
FACTOTUM	1	20	ASSEM	7:54:11	0	0	.0011	.2076	0	27	0	0	--	--	--
FACTOTUM	1	21	ASSEM	7:57:40	0	0	.0006	.0000	0	42	0	0	--	--	--
S	0	22	ASSEM	7:57:43	9600	0	.0179	.0547	11	0	3	26	--	--	--
FACTOTUM	1	23	ASSEM	7:57:43	256	512	.0025	.0023	0	117	1	6	--	--	--
C	0	24	ASSEM	7:57:49	17280	768	.0141	.0787	15	0	1	12	--	--	--
FACTOTUM	1	25	ASSEM	7:57:50	12288	768	.0032	.0013	0	0	0	8	--	--	--
DCMT	0	26	ASSEM	7:57:50	9600	768	.0224	.0941	29	0	1	6	--	--	--
FACTOTUM	1	27	ASSEM	7:57:50	12288	768	.0032	.0026	0	0	0	8	--	--	--
DCMT	0	28	ASSEM	7:57:50	9600	768	.0054	.0023	33	0	1	6	--	--	--
FACTOTUM	1	29	ASSEM	7:57:50	12288	768	.0028	.0004	0	0	0	8	--	--	--
DCMT	0	30	ASSEM	7:57:50	9600	768	.0055	.0027	27	0	1	6	--	--	--
FACTOTUM	1	31	ASSEM	7:57:50	12288	768	.0032	.0006	0	0	0	8	--	--	--
DCMT	0	32	ASSEM	7:57:50	9600	768	.0055	.0026	31	0	1	6	--	--	--
FACTOTUM	1	33	ASSEM	7:57:50	12288	768	.0032	.0020	0	0	0	8	--	--	--
DCMT	0	34	ASSEM	7:57:50	12544	768	.0151	.0453	39	0	1	6	--	--	--
FACTOTUM	1	35	ASSEM	7:57:50	12288	768	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	36	ASSEM	7:57:50	12544	768	.0057	.0019	39	0	0	6	--	--	--
FACTOTUM	1	37	ASSEM	7:57:50	12288	768	.0031	.0004	0	0	0	7	--	--	--
DCMT	0	38	ASSEM	7:57:50	12544	1536	.0076	.0036	39	890	0	6	--	--	--
FACTOTUM	1	39	ASSEM	7:57:50	12032	1536	.0029	2.5447	3	0	0	5	--	--	--
FACTOTUM	1	40	ASSEM	7:57:52	0	1536	.0007	.0003	0	85	0	0	--	--	--
FACTOTUM	1	41	ASSEM	7:58:13	0	768	.0008	.0001	16	0	0	0	--	--	--
C	0	42	ASSEM	7:58:13	17024	768	.0063	.0032	16	0	1	12	--	--	--
FACTOTUM	1	43	ASSEM	7:58:13	12288	768	.0028	.0004	0	0	0	8	--	--	--
DCMT	0	44	ASSEM	7:58:13	9600	768	.0056	.0321	29	0	1	6	--	--	--
FACTOTUM	1	45	ASSEM	7:58:13	12288	768	.0036	.0037	0	0	0	8	--	--	--
DCMT	0	46	ASSEM	7:58:13	9600	768	.0057	.0111	33	0	1	6	--	--	--
FACTOTUM	1	47	ASSEM	7:58:13	12288	768	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	48	ASSEM	7:58:13	9600	768	.0054	.0121	27	0	1	6	--	--	--
FACTOTUM	1	49	ASSEM	7:58:13	12288	768	.0030	.0003	0	0	0	8	--	--	--
DCMT	0	50	ASSEM	7:58:13	9600	768	.0058	.0184	31	0	1	6	--	--	--
FACTOTUM	1	51	ASSEM	7:58:14	12288	768	.0030	.0015	0	0	0	8	--	--	--
DCMT	0	52	ASSEM	7:58:14	12544	768	.0061	.0012	39	0	0	6	--	--	--
FACTOTUM	1	53	ASSEM	7:58:14	12288	768	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	54	ASSEM	7:58:14	12544	768	.0056	.0005	39	0	0	6	--	--	--
FACTOTUM	1	55	ASSEM	7:58:14	12288	768	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	56	ASSEM	7:58:14	12544	1536	.0074	.0042	39	855	0	6	--	--	--
FACTOTUM	1	57	ASSEM	7:58:14	12288	1536	.0036	2.5303	3	0	0	8	--	--	--
DCMT	0	58	ASSEM	7:58:16	7296	1536	.0043	.0091	45	0	0	0	--	--	--
FACTOTUM	1	60	ASSEM	7:58:16	12288	1536	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	61	ASSEM	7:58:16	7296	1536	.0041	.0013	45	0	0	0	--	--	--
FACTOTUM	1	62	ASSEM	7:58:16	12288	1536	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	63	ASSEM	7:58:16	7296	1536	.0044	.0008	45	1280	0	0	--	--	--
FACTOTUM	1	64	ASSEM	7:58:16	12288	1536	.0040	1.7660	3	0	0	8	--	--	--
DCMT	0	65	ASSEM	7:58:18	7296	1536	.0044	.0030	45	0	0	0	--	--	--
FACTOTUM	1	66	ASSEM	7:58:18	12288	1536	.0030	.0006	0	0	0	8	--	--	--
DCMT	0	67	ASSEM	7:58:18	7296	1536	.0041	.0009	45	0	0	0	--	--	--

PMARPT01 fields: The table below describes the fields contained in PMARPT01.

Field	Description
Task Code	Task code or CA-ADS dialog name
Ver Num	Version number of the level-1 program executed for the task defined above
Task Num	Sequential number assigned to the task at task initiation (also known as the task ID)

Field	Description
Task Type	Source language for the level-1 program for the task (ERUS for an external request unit)
CC	Completion code for the task: X if the task terminated abnormally; otherwise, the field is blank
Start Time	Time the task was initiated (<i>hh:mm:ss</i>)
Storage Active	Number of bytes of variable storage from a DC/UCF storage pool used by the task during execution
Storage Kept	Number of bytes of variable storage kept by the task at termination for pseudo-conversational processing; this does not include relocated storage for CA-ADS
CPU Time	Total CPU time for the task (<i>ss.ssss</i>)
Wait Time	Total wait time for the task (<i>ss.ssss</i>)
TP Read Lngth	Total number of bytes read from the terminal during task processing
TP Write Lngth	Total number of bytes written to the terminal during task processing
Num Of I/O	Number of physical I/Os performed by the task
Num of Dbcls	Number of database calls issued by the task
Num of Lvl	Number of dialog levels in the CA-ADS application structure; field is applicable to CA-ADS only
Num of Dblvl	Number of dialog levels that issued database calls; this is the number of different levels, not the highest level number; field is applicable to CA-ADS only
Num of Bufs	Number of record buffer blocks acquired for database record processing; field is applicable to CA-ADS dialogs only

4.3.2 PMARPT02: Task summary report

PMARPT02 contains one summary line for each different task executed or, for CA-ADS, for each different dialog. In the descriptions below, the word *task* should be interpreted as meaning either task or CA-ADS dialog, as appropriate to the task type displayed.

4.3 Report samples

Sample report:

REPORT NO. 02		COMPUTER ASSOCIATES INTL.										06/19/99 PAGE 1			
CA-IDMS/PM 15.0		TASK SUMMARY REPORT													
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.										DATA FROM: 6/19/99			
TASK CODE	VER NUM	NUM TIMES EXEC	TASK TYPE	NUM TIMES ABND	AVG STORAGE ACTIVE	AVG STORAGE KEPT	AVG CPU TIME (SECS)	AVG WAIT TIME (SECS)	AVG TP READ LNGLTH	AVG TP WRITE LNGLTH	AVG NUM OF I/O	AVG NUM OF DBCLS	AVG NUM OF LVLS	AVG NUM OF DBLVLS	AVG NUM OF BUFS
B	0	1	ASSEM		9856	0	0.01	.5961	0	0	2	13	--	--	--
BOM	1	12	ADS/O		30720	17109	0.02	.3391	6	727	7	92	0	0	1
BYE	0	1	ASSEM		9856	0	0.00	.0414	0	0	1	17	--	--	--
CAP	1	7	ADS/O		41179	13769	0.02	.5578	7	761	11	152	0	0	1
CAR	1	13	ADS/O		41945	16423	0.02	.3977	6	949	10	115	0	0	1
CAS	1	37	ADS/O		33218	11537	0.04	.5644	5	1023	11	166	0	1	0
CASCAS	1	6	ADS/O		32576	11776	0.03	.7107	5	788	14	145	0	0	1
CCC	1	7	ADS/O		54254	18341	0.02	.3437	7	755	10	194	0	0	1
CGL	1	13	ADS/O		33398	17388	0.02	.2833	7	794	12	107	0	0	1
CLIST	0	1	ASSEM		18176	640	0.01	2.0227	20	0	4	29	--	--	--
CLOD	0	1	UNDEF		25088	0	0.02	2.2841	0	0	5	221	--	--	--
COE	1	13	ADS/O		24930	17290	0.01	.1365	5	837	4	58	1	0	1
CPRD	1	11	ADS/O		42519	16547	0.02	.3655	6	838	10	125	1	0	1
CPRO	1	11	ADS/O		45452	16593	0.02	.1825	6	896	7	107	1	0	1
CPRS	1	12	ADS/O		36597	17739	0.01	.1443	5	887	4	74	1	0	1
CPRV	1	9	ADS/O		35584	15986	0.01	.1114	7	864	4	79	1	0	1
DCMT	0	7	ASSEM		13184	15013	0.01	.4919	19	162	2	11	--	--	--
DCUF	0	8	ASSEM		10752	3552	0.00	.1663	22	0	2	6	--	--	--
FACTOTUM	1	78	ASSEM		1971	9849	0.00	.0444	29	84	0	1	--	--	--
IDD	0	30	ASSEM	2	56508	68629	1.03	43.6643	35	839	1234	1124	--	--	--
INV	1	13	ADS/O		29588	15931	0.01	.1399	5	798	4	56	0	0	1
MPS	1	10	ADS/O		52659	15962	0.02	.3436	9	1013	8	142	0	0	1
MRP	1	10	ADS/O		37914	15616	0.02	.1704	6	819	5	86	0	0	1
OLP	0	6	ASSEM		13568	11392	0.60	13.5025	10	1147	745	3699	--	--	--
OLQ	0	25	ASSEM	2	61322	8443	0.14	7.1972	57	736	201	230	--	--	--
OPER	0	9	ASSEM		12004	15801	0.10	519.6225	78	3163	2	7	--	--	--
PMAM	0	1	ASSEM		16512	6144	0.01	.7543	10	683	7	17	--	--	--
PMIM	0	9	ASSEM		19172	15317	0.01	.4763	10	1153	4	28	--	--	--
PMRM	0	2	ASSEM		34368	5760	0.03	52.2110	36	2724	7	54	--	--	--
PMWNRVVR	1	187	ASSEM		27220	35579	0.00	.2074	3	1714	0	11	--	--	--
QUED	0	1	ASSEM		6656	0	1.07	43.5960	0	0	2008	39	--	--	--
RHDCSTTS	0	4	ASSEM		11776	0	0.06	2.3894	0	0	8	32	--	--	--
S	0	3	ASSEM		10752	0	0.01	.6712	20	0	11	38	--	--	--
SDEL	0	1	UNDEF		19328	0	0.01	2.4336	0	0	2	50	--	--	--
SFC	1	11	ADS/O		33699	17001	0.02	.2957	4	819	7	97	0	0	1
SIGNON	0	1	ASSEM		11520	768	0.02	3.7168	46	96	14	69	--	--	--
USGADEL	1	1	UNDEF		17536	0	0.02	44.3700	0	0	2	44	--	--	--
USGAFIX	1	1	UNDEF		17536	0	0.02	2.7038	0	0	1	44	--	--	--

PMARPT02 fields: The table below describes the fields contained in PMARPT02.

Field	Description
Task Code	Task code or CA-ADS dialog name
Ver Num	Version number of the level-1 program executed for the task defined above
Num Times Exec	Number of times the task was executed
Task Type	Source language for the level-1 program for the task (ERUS for an external request unit)
Num Times Abnd	Number of times the task terminated abnormally
Avg Storage Active	Average number of bytes of variable storage from an DC/UCF storage pool used by the task during execution
Avg Storage Kept	Average number of bytes of variable storage kept by the task at termination for pseudo-conversational processing; this does not include relocated storage for CA-ADS
Avg CPU Time	Average CPU time for the task (<i>ss.ssss</i>)
Avg Wait Time	Average wait time for the task (<i>ss.ssss</i>)
Avg TP Read Lngth	Average number of bytes read from the terminal during task processing
Avg TP Write Lngth	Average number of bytes written to the terminal during task processing
Avg Num of I/O	Average number of physical I/Os performed by the task
Avg Num of Dbcls	Average number of database calls issued by the task
Avg Num of Lvl	Average number of dialog levels in the CA-ADS application structure; field is applicable to CA-ADS only
Avg Num of Dbvl	Average number of dialog levels that issued database calls; this is the number of different levels, not the highest level number; field is applicable to CA-ADS only
Avg Num of Bufs	Average number of record buffer blocks acquired for database record processing; field is applicable to CA-ADS dialogs only

4.3.3 PMARPT03: CA-ADS dialog detail report

PMARPT03 contains one detail line for every execution of each CA-ADS dialog. The fields found in PMARPT03 are identical to those in Report 01 (except column 1, which is Dialog Name, rather than Task Code). See 4.3.1, "PMARPT01: Task detail report" on page 4-15 for detailed field information. Task Type, shown in Report 01, does not apply here.

Sample report:

REPORT NO. 03		COMPUTER ASSOCIATES INTL.										30/09/99 PAGE 1			
CA-IDMS/PM 15.0 CAGJF0		CA-ADS DIALOG DETAIL REPORT													
DC SYSTEM VERSION #: 71		COMPUTER ASSOCIATES INTERNATIONAL, INC.										DATA FROM: 30/09/99			
DIALOG NAME	VER NUM	TASK NUM	C C	START TIME	STORAGE ACTIVE	STORAGE KEPT	CPU TIME (SECS)	WAIT TIME (SECS)	TP READ LNGLTH	TP WRITE LNGLTH	NUM OF I/O	NUM OF DBCLS	NUM OF LVLS	NUM OF DBLVLS	NUM OF BUFS
BMRET	1	103		8:01:35	15488	6272	.0372	.2836	11	121	3	30	0	0	1
BMRET	1	104		8:01:41	25728	6272	.0228	.1754	16	112	4	27	0	0	1
BMRET	1	105		8:01:47	9728	768	.0038	.0003	1	0	0	0	0	0	0
BMRET	1	207		8:10:27	15232	6016	.0079	.0111	14	121	0	0	0	0	1
BMRET	1	206		8:10:27	15232	6016	.0074	.0260	14	121	0	0	0	0	0
BMRET	1	223		8:10:28	15232	6272	.0072	.0029	14	121	0	0	0	0	1
BMRET	1	226		8:10:28	15232	6016	.0072	.0006	14	121	0	0	0	0	0
BMRET	1	238		8:10:29	25984	6272	.0154	.1515	16	112	2	10	0	0	1
BMRET	1	235		8:10:29	15232	6016	.0073	.0302	14	121	0	0	0	0	1
BMRET	1	244		8:10:29	55808	6272	.0146	1.9891	96	3652	0	0	0	0	0
BMRET	1	251		8:10:29	25728	6272	.0124	.1461	16	112	1	10	0	0	1
BMRET	1	248		8:10:29	25984	6272	.0159	.1816	16	112	2	10	0	0	0
BMRET	1	246		8:10:29	15232	6016	.0072	.0390	14	121	0	0	0	0	0
BMRET	1	260		8:10:29	15232	6016	.0077	.0056	14	121	0	0	0	0	0
BMRET	1	259		8:10:29	25728	6272	.0171	.1438	16	112	2	10	0	0	1
BMRET	1	266		8:10:30	25984	6272	.0135	.0470	16	112	1	10	0	0	1
BMRET	1	265		8:10:30	15232	6016	.0072	.0075	14	121	0	0	0	0	1
BMRET	1	267		8:10:30	55808	6272	.0147	1.6764	96	3652	0	0	0	0	0
BMRET	1	273		8:10:31	55552	6272	.0148	1.5521	96	3652	0	0	0	0	0
BMRET	1	272		8:10:31	15232	6016	.0075	.0117	14	121	0	0	0	0	0
BMRET	1	271		8:10:31	15232	6016	.0075	.0193	14	121	0	0	0	0	0
BMRET	1	269		8:10:31	15232	6016	.0073	.0271	14	121	0	0	0	0	0
BMRET	1	281		8:10:31	55808	6272	.0136	1.4618	96	3652	0	0	0	0	0
BMRET	1	280		8:10:31	25728	6272	.0115	.0673	16	112	1	10	0	0	1
BMRET	1	279		8:10:31	25984	6272	.0139	.0816	16	112	1	10	0	0	1
BMRET	1	277		8:10:31	15232	6016	.0077	.0255	14	121	0	0	0	0	0
BMRET	1	284		8:10:31	25728	6272	.0119	.0127	16	112	1	10	0	0	1
BMRET	1	289		8:10:31	55808	6272	.0150	1.6657	96	3652	0	0	0	0	0
BMRET	1	288		8:10:31	25984	6272	.0138	.0788	16	112	1	10	0	0	0
BMRET	1	286		8:10:31	25728	6272	.0143	.0964	16	112	1	10	0	0	1
BMRET	1	295		8:10:32	15232	6016	.0086	.0074	14	121	0	0	0	0	0
BMRET	1	294		8:10:32	55808	6272	.0145	1.8189	96	3652	0	0	0	0	0
BMRET	1	292		8:10:32	25728	6272	.0113	.0512	16	112	0	10	0	0	0
BMRET	1	291		8:10:32	15232	6016	.0072	.0286	14	121	0	0	0	0	0
BMRET	1	300		8:10:32	55808	6272	.0136	2.0896	96	3652	0	0	0	0	0
BMRET	1	299		8:10:32	55552	6272	.0132	2.0939	96	3652	0	0	0	0	1
BMRET	1	298		8:10:32	55552	6272	.0149	2.0771	96	3652	0	0	0	0	1
BMRET	1	297		8:10:32	15232	6016	.0072	.0198	14	121	0	0	0	0	0
BMRET	1	296		8:10:32	15232	6016	.0074	.0285	14	121	0	0	0	0	0
BMRET	1	305		8:10:32	55552	6272	.0142	1.9555	96	3652	0	0	0	0	0
BMRET	1	303		8:10:32	55552	6272	.0122	1.9949	96	3652	0	0	0	0	1
BMRET	1	302		8:10:33	55552	6272	.0123	1.9971	96	3652	0	0	0	0	1
BMRET	1	301		8:10:33	15232	6016	.0073	.0290	14	121	0	0	0	0	1
BMRET	1	310		8:10:33	55552	6272	.0135	2.3937	96	3652	0	0	0	0	0
BMRET	1	308		8:10:33	25984	6272	.0154	.0976	16	112	1	10	0	0	0
BMRET	1	307		8:10:33	25728	6272	.0121	.1347	16	112	1	10	0	0	0
BMRET	1	306		8:10:33	15232	6016	.0075	.0225	14	121	0	0	0	0	0
BMRET	1	312		8:10:33	25984	6272	.0148	.1084	16	112	1	10	0	0	0
BMRET	1	311		8:10:33	25984	6272	.0127	.1180	16	112	1	10	0	0	0

4.3.4 PMARPT04: CA-ADS dialog summary report

PMARPT04 contains one summary line for each different CA-ADS dialog executed. The fields in PMARPT04 are identical to those in Report 02 (except column 1, which is Dialog Name, rather than Task Code). See 4.3.2, "PMARPT02: Task summary report" on page 4-17 for detailed field information. Task Type, shown in Report 02, does not apply here.

Sample report:

REPORT NO. 04		COMPUTER ASSOCIATES INTL.										06/19/99 PAGE 1			
CA-IDMS/PM 15.0		CA-ADS DIALOG SUMMARY REPORT										DATA FROM: 6/19/99			
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.													
DIALOG NAME	VER NUM	NUM TIMES EXEC	NUM TIMES ABND	AVG STORAGE ACTIVE	AVG STORAGE KEPT	AVG CPU TIME (SECS)	AVG WAIT TIME (SECS)	AVG TP READ LNGLTH	AVG TP WRITE LNGLTH	AVG NUM OF I/O	AVG NUM OF DBCLS	AVG NUM OF LVLS	AVG NUM OF DBLVLS	AVG NUM OF BUFS	
CAPDAQIN	1	2		71040	9216	.0456	1.3122	4	540	24	352	1	1	0	
CARDIPA0	1	1		52736	25472	.0322	.5265	7	1177	14	203	0	1	1	
CARDUBH0	1	1		59264	12800	.0514	1.3799	7	1103	46	411	0	1	0	
CARDUMU0	1	2		65984	8960	.0345	.7719	4	638	22	224	0	1	0	
CASDEXIT	1	12		23168	4800	.0046	.0565	14	0	0	2	0	0	0	
CASDINST	1	2		25856	11904	.0095	.2758	8	489	5	48	0	1	0	
CASDIPLM	1	2		30272	9984	.0257	.8796	5	889	20	120	0	1	0	
CASDIVUM	1	1		38400	20608	.0186	.1873	7	766	5	141	0	1	1	
CASDMENU	1	31		46443	17131	.0287	.4681	4	944	12	171	1	0	1	
CASDMEN1	1	73		26094	17999	.0074	.0398	5	1017	1	24	0	0	1	
CASDUPLT	1	1		25984	19968	.0118	.2039	7	268	8	69	0	1	1	
CBMDAPPM	1	1		49408	23168	.0353	.8173	7	468	23	302	1	1	1	
CBMDIPRT	1	3		27093	20779	.0125	.2171	4	591	6	78	0	1	1	
CCCDIPCS	1	2		117184	24064	.0416	.6702	4	477	22	498	0	1	1	
CGLDEXIT	1	1		31616	5248	.0106	.1498	14	0	4	62	0	0	0	
CGLDIOL0	1	1		42752	21120	.0424	.7792	7	1355	40	201	0	1	1	
CGLDISX0	1	2		31744	12288	.0180	.3427	4	474	12	115	0	1	1	
CGLDITL0	1	3		35627	20224	.0167	.2208	10	650	7	105	0	1	1	
CGLDMENU	1	2		50176	18304	.0414	.6650	5	890	30	233	1	0	1	
CICDIOMO	1	1		51200	20096	.0209	1.0073	7	1040	6	163	1	0	1	
CICDIORL	1	2		45376	11776	.0270	.7744	4	421	25	180	1	0	1	
CMPDUPST	1	5		71526	13722	.0307	.3530	11	1183	10	207	0	1	0	
CMRDAMOR	1	1		55296	24576	.0532	1.4330	7	769	45	414	1	1	1	
COEDIDF1	1	1		25600	19968	.0122	.2402	7	424	3	67	2	1	1	
COEDIDF2	1	1		27136	21504	.0176	.1755	7	1262	5	87	2	1	1	
CPRDIVN3	1	2		40960	19328	.0249	.3670	7	1214	14	140	2	0	1	
CPRDRCGN	1	1		87680	18304	.0674	1.6442	7	1140	42	614	2	1	0	
CPRUDF1	1	1		75008	29184	.0308	.5102	7	959	13	237	2	1	1	
CPRDUPC1	1	1		36608	20992	.0194	.2428	7	883	6	113	2	1	1	
CPRDURPT	1	1		116224	19328	.0355	.3510	7	740	14	334	2	0	1	
CPRDUVN3	1	2		39424	11648	.0162	.1711	4	598	6	124	1	0	1	
CSSDEXIT	1	3		23637	2176	.0148	.3805	12	0	3	76	0	0	0	
CSSDILLUS	1	16		34080	9984	.0480	.4611	4	1078	15	166	0	1	0	
CSSDILLUT	1	5		35789	10240	.0467	.3785	3	1309	7	208	0	1	0	
CSSDIUTG	1	3		34944	9088	.0304	.4884	5	487	11	198	0	1	0	
CSSDMENU	1	2		50176	15616	.0686	3.3333	5	1006	27	305	1	0	1	
CSSDUACC	1	2		45184	19200	.0773	.7650	3	1818	17	335	0	1	0	
CSSDUNST	1	1		38784	15744	.0419	.9846	7	577	23	273	1	0	1	
CSSDUUML	1	1		44032	21504	.0405	.7901	7	426	21	212	0	1	2	

4.3.5 PMARPT05: User detail report

PMARPT05 contains one detail line for every execution of each task, or each CA-ADS dialog, executed by the user. The user is identified at the top of the report. The detail report is followed by a summary recap of user activity.

Sample report:

4.3 Report samples

REPORT NO. 05		COMPUTER ASSOCIATES INTL.										30/09/99 PAGE 26							
CA-IDMS/PM 15.0 CAGJF0		USER DETAIL REPORT																	
DC SYSTEM VERSION #: 71		COMPUTER ASSOCIATES INTERNATIONAL, INC.										DATA FROM: 30/09/99							
USER: DBCRUSER																			
TASK CODE	VER NUM	TASK NUM	TASK TYPE C	START TIME	STORAGE ACTIVE	STORAGE KEPT	CPU TIME (SECS)	WAIT TIME (SECS)	TP READ LGTH	TP WRITE LGTH	NUM OF I/O	NUM OF DBCLS	NUM OF LVLS	NUM OF DBLVLS	NUM OF BUFBS				
BMRET	1	1332	ADS/O	8:12:06	9728	768	.0040	.0005	1	0	0	0	0	0	0				
BMRET	1	1331	ADS/O	8:12:06	9728	768	.0040	.0048	1	0	0	0	0	0	0				
BMRET	1	1330	ADS/O	8:12:06	9728	768	.0038	.0090	1	0	0	0	0	0	0				
FACTOTUM	1	1335	ASSEM	8:12:06	0	768	.0005	.0184	0	42	0	0	--	--	--				
FACTOTUM	1	1334	ASSEM	8:12:06	0	768	.0006	.0190	0	42	0	0	--	--	--				
FACTOTUM	1	1333	ASSEM	8:12:06	0	768	.0007	.0198	0	42	0	0	--	--	--				
BMRET	1	1339	ADS/O	8:12:06	9728	768	.0042	.0035	1	0	0	0	0	0	0				
BMRET	1	1338	ADS/O	8:12:06	9728	768	.0039	.0092	1	0	0	0	0	0	0				
FACTOTUM	1	1341	ASSEM	8:12:06	0	768	.0006	.0005	0	42	0	0	--	--	--				
FACTOTUM	1	1340	ASSEM	8:12:06	0	768	.0007	.0012	0	42	0	0	--	--	--				
BMRET	1	1346	ADS/O	8:12:07	9728	768	.0043	.0023	1	0	0	0	0	0	0				
BMRET	1	1345	ADS/O	8:12:07	9728	768	.0042	.0089	1	0	0	0	0	0	0				
FACTOTUM	1	1348	ASSEM	8:12:07	0	768	.0007	.0015	0	42	0	0	--	--	--				
FACTOTUM	1	1347	ASSEM	8:12:07	0	768	.0007	.0024	0	42	0	0	--	--	--				
BMRET	1	1351	ADS/O	8:12:07	9728	768	.0046	.0062	1	0	0	0	0	0	0				
BMRET	1	1350	ADS/O	8:12:08	9728	768	.0045	.0113	1	0	0	0	0	0	0				
BMRET	1	1349	ADS/O	8:12:08	9728	768	.0039	.0159	1	0	0	0	0	0	0				
FACTOTUM	1	1355	ASSEM	8:12:08	0	768	.0005	.0014	0	42	0	0	--	--	--				
FACTOTUM	1	1354	ASSEM	8:12:08	0	768	.0009	.0020	0	42	0	0	--	--	--				
FACTOTUM	1	1353	ASSEM	8:12:08	0	768	.0006	.0031	0	42	0	0	--	--	--				
BMRET	1	1352	ADS/O	8:12:08	9728	768	.0042	.0040	1	0	0	0	0	0	0				
FACTOTUM	1	1356	ASSEM	8:12:08	0	768	.0005	.0041	0	42	0	0	--	--	--				
BMRET	1	1361	ADS/O	8:12:08	9728	768	.0041	.0013	1	0	0	0	0	0	0				
FACTOTUM	1	1362	ASSEM	8:12:08	0	768	.0006	.0068	0	42	0	0	--	--	--				
*** SUMMARY RECAP ***					FOR USERID: DBCRUSER					FOR DC SYSTEM VERSION #: 71 ON 30/09/99									
TOTAL NUMBER OF TASKS :					1199					AVERAGE STORAGE USED :					36187				
TOTAL PHYSICAL I/O :					193					AVERAGE STORAGE KEPT :					5501				
TOTAL DATABASE CALLS :					5267					AVERAGE TP I/O READ LENGTH :					51				
TOTAL ABNORMAL TERMINATIONS :					0					AVERAGE TP I/O WRITE LENGTH :					1718				
TOTAL CPU TIME (HH.MM.SS):					0:00:13														
*** SUMMARY RECAP ***					FOR USERID: DBCRUSER					FOR DC SYSTEM VERSION #: 71 ON ALL DATES									
TOTAL NUMBER OF TASKS :					1199					AVERAGE STORAGE USED :					36187				
TOTAL PHYSICAL I/O :					193					AVERAGE STORAGE KEPT :					5501				
TOTAL DATABASE CALLS :					5267					AVERAGE TP I/O READ LENGTH :					51				

User identification: The user identification at the top of the report varies, depending on the circumstances at the time the tasks shown on the report were executed. A prefix to the user identification indicates how the tasks were executed. The user identification itself corresponds to the prefix.

If no user was signed on under the DC/UCF system or no operator ID was available for CICS, an appropriate message replaces the ID. For example, in the DC/UCF system, the message is DC-NO USER ID AVAILABLE.

Prefix	Task executed under	User identification
DC	DC/UCF	DC/UCF user ID
CICS	CICS	CICS operator ID
TPMON	TP monitor other than DC/UCF or CICS	TP monitor ID
ERUS	Batch	None: BATCH displays instead of an ID
ERUS	ERUS, if PERFMON=NO is specified in the CA-IDMS operating-system-specific SVC macro	None: UNDEFINED displays instead of an ID

PMARPT05 fields: The fields in PMARPT05 are identical to those in report 01. See 4.3.1, “PMARPT01: Task detail report” on page 4-15 for detailed field descriptions.

Descriptions of the additional Summary Recap fields at the end of PMARPT05 are shown in the following table. Interpret the word *task* to mean either task or CA-ADS dialog, as appropriate. The fields in PMARPT05 are identical to those in Report 01. See 4.3.1, “PMARPT01: Task detail report” on page 4-15 for detailed field information.

Field	Description
Total Number of Tasks	Total tasks executed by the user
Total Physical I/O	Total number of physical I/Os performed by the tasks
Total Database Calls	Total number of database calls issued by the tasks
Total Abnormal Terminations	Total number of tasks that terminated abnormally
Total CPU Time	Total CPU time for the above tasks (<i>hh:mm:ss</i>)
Average Storage Used	Average number of bytes of variable storage from a DC/UCF storage pool used by the tasks during execution
Average Storage Kept	Average number of bytes of variable storage kept by the tasks at task termination for pseudo-conversational processing; this does not include relocated storage for CA-ADS
Average TP I/O Read Length	Average number of bytes read from the terminal during task processing
Average TP I/O Write Length	Average number of bytes written to the terminal during task processing

4.3.6 PMARPT06: User summary report

PMARPT06 contains one summary line for each different task, or each different CA-ADS dialog, executed by the user identified at the top of the report. The report is followed by a summary recap of user activity.

Sample report:

TASK CODE	VER NUM	NUM TIMES EXEC	TASK TYPE	NUM TIMES ABND	AVG STORAGE ACTIVE	AVG STORAGE KEPT	AVG CPU TIME (SECS)	AVG WAIT TIME (SECS)	AVG TP READ LENGTH	AVG TP WRITE LENGTH	AVG NUM OF I/O	AVG NUM OF DBCLS	AVG NUM OF LVL	AVG NUM OF DBLVL	AVG NUM OF BUFS
REPORT NO. 06	COMPUTER ASSOCIATES INTL.										06/19/99 PAGE		1		
CA-IDMS/PM 15.0	USER SUMMARY REPORT														
DC SYSTEM VERSION #: 56	COMPUTER ASSOCIATES INTERNATIONAL, INC.										DATA FROM: 6/19/99				
USER: EMMWIO2															
FACTOTUM	1	5	ASSEM		1562	14336	.0014	.5050	428	66	1	7	NA	NA	NA
PMAM	0	1	ASSEM		16512	6144	.0133	.7543	10	683	7	17	NA	NA	NA
PMIM	0	1	ASSEM		17408	10624	.0094	.2286	10	1153	6	17	NA	NA	NA
PMRM	0	1	ASSEM		26112	512	.0279	86.6013	46	3325	2	12	NA	NA	NA
PMWDRVR	1	136	ASSEM		29404	42790	.0038	.1650	4	1737	0	6	NA	NA	NA
SIGNON	0	1	ASSEM		11520	768	.0159	3.7168	46	96	14	69	NA	NA	NA
*** SUMMARY RECAP *** FOR USERID: EMMWIO2															
TOTAL NUMBER OF TASKS :					145		AVERAGE STORAGE USED :					28126			
TOTAL PHYSICAL I/O :					46		AVERAGE STORAGE KEPT :					40753			
TOTAL DATABASE CALLS :					982		AVERAGE TP I/O READ LENGTH :					19			
TOTAL ABNORMAL TERMINATIONS :					0		AVERAGE TP I/O WRITE LENGTH :					1668			
TOTAL CPU TIME (HH:MM:SS):					0:00:01		FOR DC SYSTEM VERSION #:					56 ON 6/19/99			
*** SUMMARY RECAP *** FOR USERID: EMMWIO2															
TOTAL NUMBER OF TASKS :					145		AVERAGE STORAGE USED :					28126			
TOTAL PHYSICAL I/O :					46		AVERAGE STORAGE KEPT :					40753			
TOTAL DATABASE CALLS :					982		AVERAGE TP I/O READ LENGTH :					19			
TOTAL ABNORMAL TERMINATIONS :					0		AVERAGE TP I/O WRITE LENGTH :					1668			
TOTAL CPU TIME (HH:MM:SS):					0:00:01		*** TOTALS ***								
TOTAL NUMBER OF TASKS :					145		AVERAGE STORAGE USED :					28126			
TOTAL PHYSICAL I/O :					46		AVERAGE STORAGE KEPT :					40753			
TOTAL DATABASE CALLS :					982		AVERAGE TP I/O READ LENGTH :					19			
TOTAL ABNORMAL TERMINATIONS :					0		AVERAGE TP I/O WRITE LENGTH :					1668			
TOTAL CPU TIME (HH:MM:SS):					0:00:01										

User identification: The user identification at the top of the report varies, depending on the circumstances at the time the tasks shown on the report were executed. A prefix to the user identification specifies how the tasks were executed. The user identification itself corresponds to the prefix:

Prefix	Task executed under	User identification
DC	DC/UCF	DC/UCF user ID
CICS	CICS	CICS operator ID
TPMON	TP monitor other than DC/UCF or CICS	TP monitor ID
ERUS	Batch	None: BATCH displays instead of an ID
ERUS	ERUS, if PERFMON=NO is specified in the CA-IDMS operating-system-specific SVC macro	None: UNDEFINED displays instead of an ID

If no user was signed on under the DC/UCF system or no operator ID was available for CICS, an appropriate message replaces the ID. For example, in the DC/UCF system, the message is DC-NO USER ID AVAILABLE.

PMARPT06 fields: The fields in PMARPT06 are identical to those in report 02. See 4.3.2, “PMARPT02: Task summary report” on page 4-17 for detailed field descriptions.

Descriptions of the additional Summary Recap fields at the end of PMARPT06 are shown in the following table. Interpret the word *task* to mean either task or CA-ADS dialog, as appropriate.

Field	Description
Total Number of Tasks	Total tasks executed by the user
Total Physical I/O	Total number of physical I/Os performed by the tasks
Total Database Calls	Total number of database calls issued by the tasks
Total Abnormal Terminations	Total number of tasks that terminated abnormally
Total CPU Time	Total CPU time for the above tasks (<i>hh:mm:ss</i>)
Average Storage Used	Average number of bytes of variable storage from a DC/UCF storage pool used by the tasks during execution
Average Storage Kept	Average number of bytes of variable storage kept by the tasks at task termination for pseudo-conversational processing; this does not include relocated storage for CA-ADS
Average TP I/O Read Length	Average number of bytes read from the terminal during task processing
Average TP I/O Write Length	Average number of bytes written to the terminal during task processing

4.3.7 PMARPT07: Billing group detail report

PMARPT07 contains one detail line for every execution of each task, or each CA-ADS dialog, executed under the billing group code. The billing group code is shown at the top of the report. The detail report is followed by a summary recap of billing group activity.

4.3 Report samples

Sample report:

REPORT NO. 07		COMPUTER ASSOCIATES INTL.				30/09/99 PAGE 1									
CA-IDMS/PM 15.0 CAGJF0		BILLING GROUP DETAIL REPORT													
DC SYSTEM VERSION #: 71		COMPUTER ASSOCIATES INTERNATIONAL, INC.				DATA FROM: 30/09/99									
BILLING GROUP: UNDEFINED															
TASK CODE	VER NUM	TASK NUM	TASK TYPE C	START TIME	STORAGE ACTIVE	STORAGE KEPT	CPU TIME (SECS)	WAIT TIME (SECS)	TP READ LNGLTH	TP WRITE LNGLTH	NUM OF I/O	NUM OF DBCLS	NUM OF LVLS	NUM OF DBLVLS	NUM OF BUF5
QUED	0	18	ASSEM	7:54:11	5760	0	.8927	4.5380	0	0	1002	26	--	--	--
CLOD	0	19	ASSEM	7:54:11	13056	0	.0552	.3059	0	0	10	94	--	--	--
FACTOTUM	1	20	ASSEM	7:54:11	0	0	.0011	.2076	0	27	0	0	--	--	--
FACTOTUM	1	21	ASSEM	7:57:40	0	0	.0006	.0000	0	42	0	0	--	--	--
S	0	22	ASSEM	7:57:43	9600	0	.0179	.0547	11	0	3	26	--	--	--
FACTOTUM	1	23	ASSEM	7:57:43	256	512	.0025	.0023	0	117	1	6	--	--	--
C	0	24	ASSEM	7:57:49	17280	768	.0141	.0787	15	0	1	12	--	--	--
FACTOTUM	1	25	ASSEM	7:57:50	12288	768	.0032	.0013	0	0	0	8	--	--	--
DCMT	0	26	ASSEM	7:57:50	9600	768	.0224	.0941	29	0	1	6	--	--	--
FACTOTUM	1	27	ASSEM	7:57:50	12288	768	.0032	.0026	0	0	0	8	--	--	--
DCMT	0	28	ASSEM	7:57:50	9600	768	.0054	.0023	33	0	1	6	--	--	--
FACTOTUM	1	29	ASSEM	7:57:50	12288	768	.0028	.0004	0	0	0	8	--	--	--
DCMT	0	30	ASSEM	7:57:50	9600	768	.0055	.0027	27	0	1	6	--	--	--
FACTOTUM	1	31	ASSEM	7:57:50	12288	768	.0032	.0006	0	0	0	8	--	--	--
DCMT	0	32	ASSEM	7:57:50	9600	768	.0055	.0026	31	0	1	6	--	--	--
FACTOTUM	1	33	ASSEM	7:57:50	12288	768	.0032	.0020	0	0	0	8	--	--	--
DCMT	0	34	ASSEM	7:57:50	12544	768	.0151	.0453	39	0	1	6	--	--	--
FACTOTUM	1	35	ASSEM	7:57:50	12288	768	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	36	ASSEM	7:57:50	12544	768	.0057	.0019	39	0	0	6	--	--	--
FACTOTUM	1	37	ASSEM	7:57:50	12288	768	.0031	.0004	0	0	0	7	--	--	--
DCMT	0	38	ASSEM	7:57:50	12544	1536	.0076	.0036	39	890	0	6	--	--	--
FACTOTUM	1	39	ASSEM	7:57:50	12032	1536	.0029	2.5447	3	0	0	5	--	--	--
FACTOTUM	1	40	ASSEM	7:57:52	0	1536	.0007	.0003	0	85	0	0	--	--	--
FACTOTUM	1	41	ASSEM	7:58:13	0	768	.0008	.0001	16	0	0	0	--	--	--
C	0	42	ASSEM	7:58:13	17024	768	.0063	.0032	16	0	1	12	--	--	--
FACTOTUM	1	43	ASSEM	7:58:13	12288	768	.0028	.0004	0	0	0	8	--	--	--
DCMT	0	44	ASSEM	7:58:13	9600	768	.0056	.0321	29	0	1	6	--	--	--
FACTOTUM	1	45	ASSEM	7:58:13	12288	768	.0036	.0037	0	0	0	8	--	--	--
DCMT	0	46	ASSEM	7:58:13	9600	768	.0057	.0111	33	0	1	6	--	--	--
FACTOTUM	1	47	ASSEM	7:58:13	12288	768	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	48	ASSEM	7:58:13	9600	768	.0054	.0121	27	0	1	6	--	--	--
FACTOTUM	1	49	ASSEM	7:58:13	12288	768	.0030	.0003	0	0	0	8	--	--	--
DCMT	0	50	ASSEM	7:58:13	9600	768	.0058	.0184	31	0	1	6	--	--	--
FACTOTUM	1	51	ASSEM	7:58:14	12288	768	.0030	.0015	0	0	0	8	--	--	--
DCMT	0	52	ASSEM	7:58:14	12544	768	.0061	.0012	39	0	0	6	--	--	--
FACTOTUM	1	53	ASSEM	7:58:14	12288	768	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	54	ASSEM	7:58:14	12544	768	.0056	.0005	39	0	0	6	--	--	--
FACTOTUM	1	55	ASSEM	7:58:14	12288	768	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	56	ASSEM	7:58:14	12544	1536	.0074	.0042	39	855	0	6	--	--	--
FACTOTUM	1	57	ASSEM	7:58:14	12288	1536	.0036	2.5303	3	0	0	8	--	--	--
DCMT	0	58	ASSEM	7:58:16	7296	1536	.0043	.0091	45	0	0	0	--	--	--
FACTOTUM	1	60	ASSEM	7:58:16	12288	1536	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	61	ASSEM	7:58:16	7296	1536	.0041	.0013	45	0	0	0	--	--	--
FACTOTUM	1	62	ASSEM	7:58:16	12288	1536	.0029	.0004	0	0	0	8	--	--	--
DCMT	0	63	ASSEM	7:58:16	7296	1536	.0044	.0008	45	1280	0	0	--	--	--
FACTOTUM	1	64	ASSEM	7:58:16	12288	1536	.0040	1.7660	3	0	0	8	--	--	--
DCMT	0	65	ASSEM	7:58:18	7296	1536	.0044	.0030	45	0	0	0	--	--	--
FACTOTUM	1	66	ASSEM	7:58:18	12288	1536	.0030	.0006	0	0	0	8	--	--	--

PMARPT07 fields: The fields in PMARPT07 are identical to those in report 01. See 4.3.1, “PMARPT01: Task detail report” on page 4-15 for detailed field descriptions.

Descriptions of the additional Summary Recap fields at the end of PMARPT07 are shown in the following table. Interpret the word *task* to mean either task or CA-ADS dialog, as appropriate.

Field	Description
Total Number of Tasks	Total tasks executed by the user
Total Physical I/O	Total number of physical I/Os performed by the tasks
Total Database Calls	Total number of database calls issued by the tasks
Total Abnormal Terminations	Total number of tasks that terminated abnormally
Total CPU Time	Total CPU time for the above tasks (<i>hh:mm:ss</i>)
Average Storage Used	Average number of bytes of variable storage from a DC/UCF storage pool used by the tasks during execution
Average Storage Kept	Average number of bytes of variable storage kept by the tasks at task termination for pseudo-conversational processing; this does not include relocated storage for CA-ADS
Average TP I/O Read Length	Average number of bytes read from the terminal during task processing
Average TP I/O Write Length	Average number of bytes written to the terminal during task processing

4.3.8 PMARPT08: Billing group summary report

PMARPT08 contains one summary line for each different task, or each different CA-ADS dialog, executed under the billing group. The billing group is shown at the top of the report. The report is followed by a summary recap of billing group activity.

Sample report:

REPORT NO. 08		COMPUTER ASSOCIATES INTL.										06/19/99 PAGE 1			
CA-IDMS/PM 15.0		BILLING GROUP SUMMARY REPORT													
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.										DATA FROM: 6/19/99			
BILLING GROUP: UNDEFINED															
TASK CODE	VER NUM	NUM TIMES EXEC	TASK TYPE	NUM TIMES ABND	AVG STORAGE ACTIVE	AVG STORAGE KEPT	AVG CPU TIME (SECS)	AVG WAIT TIME (SECS)	AVG TP READ LNGLTH	AVG TP WRITE LNGLTH	AVG NUM OF I/O	AVG NUM OF DBCLS	AVG NUM OF LVLS	AVG NUM OF DBLVLS	AVG NUM OF BUFS
B	0	1	ASSEM		9856	0	.0051	.5961	0	0	2	13	--	--	--
BOM	1	12	ADS/O		30720	17109	.0153	.3391	6	727	7	92	0	0	1
BYE	0	1	ASSEM		9856	0	.0030	.0414	0	0	1	17	--	--	--
CAP	1	7	ADS/O		41179	13769	.0240	.5578	7	761	11	152	0	0	1
CAR	1	13	ADS/O		41945	16423	.0196	.3977	6	949	10	115	0	0	1
CAS	1	37	ADS/O		33218	11537	.0405	.5644	5	1023	11	166	0	1	0
CASCAS	1	6	ADS/O		32576	11776	.0262	.7107	5	788	14	145	0	0	1
CCC	1	7	ADS/O		54254	18341	.0229	.3437	7	755	10	194	0	0	1
CGL	1	13	ADS/O		33398	17388	.0196	.2833	7	794	12	107	0	0	1
CLIST	0	1	ASSEM		18176	640	.0096	2.0227	20	0	4	29	--	--	--
CLOD	0	1	UNDEF		25088	0	.0247	2.2841	0	0	5	221	--	--	--
COE	1	13	ADS/O		24930	17290	.0126	.1365	5	837	4	58	1	0	1
CPRD	1	11	ADS/O		42519	16547	.0198	.3655	6	838	10	125	1	0	1
CPRO	1	11	ADS/O		45452	16593	.0172	.1825	6	896	7	107	1	0	1
CPRS	1	12	ADS/O		36597	17739	.0142	.1443	5	887	4	74	1	0	1
CPRV	1	9	ADS/O		35584	15986	.0142	.1114	7	864	4	79	1	0	1
DCMT	0	7	ASSEM		13184	15013	.0063	.4919	19	162	2	11	--	--	--
DCUF	0	8	ASSEM		10752	3552	.0031	.1663	22	0	2	6	--	--	--
FACTOTUM	1	78	ASSEM		1971	9849	.0005	.0444	29	84	0	1	--	--	--
IDD	0	30	ASSEM	2	56508	68629	1.0281	43.6643	35	839	1234	1124	--	--	--
INV	1	13	ADS/O		29588	15931	.0118	.1399	5	798	4	56	0	0	1
MPS	1	10	ADS/O		52659	15962	.0224	.3436	9	1013	8	142	0	0	1
MRP	1	10	ADS/O		37914	15616	.0166	.1704	6	819	5	86	0	0	1
OLP	0	6	ASSEM		13568	11392	.5986	13.5025	10	1147	745	3699	--	--	--
OLQ	0	25	ASSEM	2	61322	8443	.1381	7.1972	57	736	201	230	--	--	--
OPER	0	9	ASSEM		12004	15801	.0958	519.6225	78	3163	2	7	--	--	--
PMAM	0	1	ASSEM		16512	6144	.0133	.7543	10	683	7	17	--	--	--
PMIM	0	9	ASSEM		19172	15317	.0101	.4763	10	1153	4	28	--	--	--
PMRM	0	2	ASSEM		34368	5760	.0321	52.2110	36	2724	7	54	--	--	--
PMWDRVR	1	187	ASSEM		27220	35579	.0043	.2074	3	1714	0	11	--	--	--
QUED	0	1	ASSEM		6656	0	1.0723	43.5960	0	0	2008	39	--	--	--
RHDCSTTS	0	4	ASSEM		11776	0	.0593	2.3894	0	0	8	32	--	--	--
S	0	3	ASSEM		10752	0	.0107	.6712	20	0	11	38	--	--	--
SDEL	0	1	UNDEF		19328	0	.0070	2.4336	0	0	2	50	--	--	--
SFC	1	11	ADS/O		33699	17001	.0159	.2957	4	819	7	97	0	0	1
SIGNON	0	1	ASSEM		11520	768	.0159	3.7168	46	96	14	69	--	--	--
USGADEL	1	1	UNDEF		17536	0	.0179	44.3700	0	0	2	44	--	--	--
USGAFIX	1	1	UNDEF		17536	0	.0157	2.7038	0	0	1	44	--	--	--
*** SUMMARY RECAP ***		FOR BILLING GROUP: UNDEFINED				FOR DC SYSTEM VERSION #: 56 ON 6/19/99									
		TOTAL NUMBER OF TASKS :				AVERAGE STORAGE USED :				28735					
		TOTAL PHYSICAL I/O :				AVERAGE STORAGE KEPT :				23064					
		TOTAL DATABASE CALLS :				AVERAGE TP I/O READ LENGTH :				14					
		TOTAL ABNORMAL TERMINATIONS :				AVERAGE TP I/O WRITE LENGTH :				1038					
		TOTAL CPU TIME (HH:MM:SS):				0:00:46									

PMARPT08 fields: The fields in PMARPT08 are identical to those in report 02. See 4.3.2, "PMARPT02: Task summary report" on page 4-17 for detailed field descriptions.

Descriptions of the additional Summary Recap fields at the end of PMARPT08 are shown in the following table. Interpret the word *task* to mean either task or CA-ADS dialog, as appropriate.

Field	Description
Total Number of Tasks	Total tasks executed by the user
Total Physical I/O	Total number of physical I/Os performed by the tasks
Total Database Calls	Total number of database calls issued by the tasks
Total Abnormal Terminations	Total number of tasks that terminated abnormally
Total CPU Time	Total CPU time for the above tasks (<i>hh:mm:ss</i>)
Average Storage Used	Average number of bytes of variable storage from a DC/UCF storage pool used by the tasks during execution
Average Storage Kept	Average number of bytes of variable storage kept by the tasks at task termination for pseudo-conversational processing; this does not include relocated storage for CA-ADS
Average TP I/O Read Length	Average number of bytes read from the terminal during task processing
Average TP I/O Write Length	Average number of bytes written to the terminal during task processing

4.3.9 PMARPT09: Abnormal termination detail report

PMARPT09 contains one detail line for every execution of each task or CA-ADS dialog that terminated abnormally.

Sample report:

TASK CODE	VER NUM	TASK NUM	TASK TYPE	ABEND CODE	MSG ID	START TIME	STORAGE ACTIVE	STORAGE KEPT	CPU TIME (SECS)	WAIT TIME (SECS)	NUM OF I/O	NUM OF DBCLS	NUM OF LVLS	NUM OF DBLVLS	NUM OF BUFS
SHOWMAP	0	47	ASSEM	D002	081009	3:02:54	6272	768	.1014	1.2446	5	24	--	--	--
SHOWMAP	0	51	ASSEM	D002	081009	3:03:16	6272	768	.0277	.2153	2	24	--	--	--
SECXRAY	1	91	ASSEM	D003	027001	3:08:06	19712	4992	.0171	.2949	6	35	--	--	--
SECXRAY	1	93	ASSEM	D003	027001	3:08:12	19712	4992	.0137	.1846	2	33	--	--	--

PMARPT09 fields: The fields in PMARPT09 are similar to those in Report 01. See 4.3.1, "PMARPT01: Task detail report" on page 4-15 for detailed field information. The CC (completion code), TP Read Length, and TP Write Length fields shown in Report 01, do not apply here.

The following table describes fields unique to PMARPT09. Interpret the word *task* to mean either task or CA-ADS dialog, as appropriate.

Field	Description
Task Abend Code	Four-character task abend code for the task. A task abend can be issued either from within the task or from the DC-UCF system. This is only applicable if a task abend caused the abnormal termination.
Msg Id	Six-character ID of the message that indicates the abnormal status of the executing task.
Sevr Code	Severity code associated with the message ID, in the range 0 through 9.

4.3.10 PMARPT10: Abnormal termination summary report

PMARPT10 contains one summary line for each task or CA-ADS dialog that terminated abnormally.

The fields in PMARPT10 are identical to those in Report 02. See 4.3.2, “PMARPT02: Task summary report” on page 4-17 for detailed field information.

Sample report:

REPORT NO. 10		COMPUTER ASSOCIATES INTL.										06/19/99		PAGE	1
CA-IDMS/PM 15.0		ABNORMAL TERMINATION SUMMARY REPORT										DATA FROM: 6/19/99			
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.													
TASK CODE	VER NUM	NUM TIMES EXEC	TASK TYPE	NUM TIMES ABND	AVG STORAGE ACTIVE	AVG STORAGE KEPT	AVG CPU TIME (SECS)	AVG WAIT TIME (SECS)	AVG READ LENGTH	AVG WRITE LENGTH	AVG NUM OF I/O	AVG NUM OF DBCLS	AVG NUM OF LVLS	AVG NUM OF DBLVLS	AVG NUM OF BUF
IDD	0	30	ASSEM	2	56508	68629	1.0281	43.6643	0	0	1234	1124	--	--	--
OLQ	0	25	ASSEM	2	61322	8443	.1381	7.1972	0	0	201	230	--	--	--

4.3.11 PMARPT11: LTERM detail report

PMARPT11 contains one detail line for each task or CA-ADS dialog invoked from the logical terminal identified at the top of the report.

The fields in PMARPT11 are identical to those in Report 01. See 4.3.1, "PMARPT01: Task detail report" on page 4-15 for detailed field information.

Sample report:

REPORT NO. 11		COMPUTER ASSOCIATES INTL.						30/09/99 PAGE 2								
CA-IDMS/PM 15.0 CAGJF0		LTERM DETAIL REPORT														
DC SYSTEM VERSION #: 71		COMPUTER ASSOCIATES INTERNATIONAL, INC.						DATA FROM: 30/09/99								
LTERM: LD000000																
TASK CODE	VER NUM	TASK NUM	TASK C TYPE	START TIME	STORAGE ACTIVE	STORAGE KEPT	CPU TIME (SECS)	WAIT TIME (SECS)	TP READ LGTH	TP WRITE LGTH	NUM OF I/O	NUM OF DBCLS	NUM OF LVLS	NUM OF DBLVLS	NUM OF BUF	
QUED	0	18	ASSEM	7:54:11	5760	0	.8927	4.5380	0	0	1002	26	--	--	--	
*** SUMMARY RECAP *** FOR LTERM: LD000000												FOR DC SYSTEM VERSION #: 71 ON 30/09/99				
TOTAL NUMBER OF TASKS :						1	AVERAGE STORAGE USED :						5760			
TOTAL PHYSICAL I/O :						1002	AVERAGE STORAGE KEPT :						0			
TOTAL DATABASE CALLS :						26	AVERAGE TP I/O READ LENGTH :						0			
TOTAL ABNORMAL TERMINATIONS :						0	AVERAGE TP I/O WRITE LENGTH :						0			
TOTAL CPU TIME (HH.MM.SS):						0:00:01										
*** SUMMARY RECAP *** FOR LTERM: LD000000												FOR DC SYSTEM VERSION #: 71 ON ALL DATES				
TOTAL NUMBER OF TASKS :						1	AVERAGE STORAGE USED :						5760			
TOTAL PHYSICAL I/O :						1002	AVERAGE STORAGE KEPT :						0			
TOTAL DATABASE CALLS :						26	AVERAGE TP I/O READ LENGTH :						0			
TOTAL ABNORMAL TERMINATIONS :						0	AVERAGE TP I/O WRITE LENGTH :						0			
TOTAL CPU TIME (HH.MM.SS):						0:00:01										
*** SUMMARY RECAP *** FOR LTERM: LD000000												*** TOTALS ***				
TOTAL NUMBER OF TASKS :						1	AVERAGE STORAGE USED :						5760			
TOTAL PHYSICAL I/O :						1002	AVERAGE STORAGE KEPT :						0			
TOTAL DATABASE CALLS :						26	AVERAGE TP I/O READ LENGTH :						0			
TOTAL ABNORMAL TERMINATIONS :						0	AVERAGE TP I/O WRITE LENGTH :						0			
TOTAL CPU TIME (HH.MM.SS):						0:00:01										

4.3.12 PMARPT12: LTERM summary report

PMARPT12 contains one summary line for each task or CA-ADS dialog invoked from the logical terminal. The summary line is identified at the top of the report.

The fields in PMARPT12 are identical to those in Report 02. See 4.3.2, "PMARPT02: Task summary report" on page 4-17 for detailed field information.

Sample report:

REPORT NO. 12		COMPUTER ASSOCIATES INTL.										06/19/99 PAGE 9					
CA-IDMS/PM 15.0 CAGJF0		LTERM SUMMARY REPORT															
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.										DATA FROM: 6/19/99					
LTERM: LV56002																	
TASK CODE	VER NUM	TASK NUM	TASK TYPE	NUM TIMES EXEC	AVG STORAGE ACTIVE	AVG STORAGE KEPT	AVG CPU TIME (SECS)	AVG WAIT TIME (SECS)	AVG TP READ LNGLTH	AVG TP WRITE LNGLTH	AVG NUM OF I/O	AVG NUM OF DBCLS	AVG NUM OF LVLS	AVG NUM OF DBLVLS	AVG NUM OF BUFS		
B	0	1	ASSEM		9856	0	.0051	.5961	0	0	2	13	--	--	--		
BYE	0	1	ASSEM		9856	0	.0030	.0414	0	0	1	17	--	--	--		
DCMT	0	1	ASSEM		10624	94080	.0040	.3104	21	0	0	6	--	--	--		
FACTOTUM	1	17	ASSEM		1114	30328	.0007	.1713	131	124	0	2	--	--	--		
IDD	0	27	ASSEM	2	57064	75103	1.1287	47.4342	36	873	1355	1229	--	--	--		
OPER	0	2	ASSEM		16000	47296	.0388	150.0503	86	-5178	9	20	--	--	--		
PMAM	0	1	ASSEM		16512	6144	.0133	.7543	10	683	7	17	--	--	--		
PMIM	0	2	ASSEM		17408	10624	.0079	.1799	10	1153	4	14	--	--	--		
PMRM	0	1	ASSEM		26112	512	.0279	86.6013	46	3325	2	12	--	--	--		
PMWDRVR	1	145	ASSEM		28458	40575	.0038	.1578	4	1739	0	6	--	--	--		
S	0	1	ASSEM		10752	0	.0110	1.2497	23	0	13	35	--	--	--		
SIGNON	0	1	ASSEM		11520	768	.0159	3.7168	46	96	14	69	--	--	--		
*** SUMMARY RECAP ***		FOR LTERM: LV56002				FOR DC SYSTEM VERSION #: 56 ON 6/19/99											
		TOTAL NUMBER OF TASKS :				200		AVERAGE STORAGE USED :								29241	
		TOTAL PHYSICAL I/O :				36667		AVERAGE STORAGE KEPT :								43220	
		TOTAL DATABASE CALLS :				34346		AVERAGE TP I/O READ LENGTH :								20	
		TOTAL ABNORMAL TERMINATIONS :				2		AVERAGE TP I/O WRITE LENGTH :								1370	
		TOTAL CPU TIME (HH:MM:SS):				0:00:31											
*** SUMMARY RECAP ***		FOR LTERM: LV56002				FOR DC SYSTEM VERSION #: 56 ON ALL DATES											
		TOTAL NUMBER OF TASKS :				200		AVERAGE STORAGE USED :								29241	
		TOTAL PHYSICAL I/O :				36667		AVERAGE STORAGE KEPT :								43220	
		TOTAL DATABASE CALLS :				34346		AVERAGE TP I/O READ LENGTH :								20	
		TOTAL ABNORMAL TERMINATIONS :				2		AVERAGE TP I/O WRITE LENGTH :								1370	
		TOTAL CPU TIME (HH:MM:SS):				0:00:31											
*** SUMMARY RECAP ***		FOR LTERM: LV56002				*** TOTALS ***											
		TOTAL NUMBER OF TASKS :				200		AVERAGE STORAGE USED :								29241	
		TOTAL PHYSICAL I/O :				36667		AVERAGE STORAGE KEPT :								43220	
		TOTAL DATABASE CALLS :				34346		AVERAGE TP I/O READ LENGTH :								20	
		TOTAL ABNORMAL TERMINATIONS :				2		AVERAGE TP I/O WRITE LENGTH :								1370	

4.3.13 PMARPT13: PTERM detail report

PMARPT13 contains one detail line for each task or CA-ADS dialog invoked from the physical terminal. The detail line is identified at the top of the report.

The fields in PMARPT13 are identical to those in Report 01. See 4.3.1, "PMARPT01: Task detail report" on page 4-15 for detailed field information.

Sample report:

REPORT NO. 13		COMPUTER ASSOCIATES INTL.		30/09/99 PAGE 1												
CA-IDMS/PM 15.0 CAGJF0		PTERM DETAIL REPORT														
DC SYSTEM VERSION #: 71		COMPUTER ASSOCIATES INTERNATIONAL, INC.		DATA FROM: 30/09/99												
PTERM: NONTERM																
TASK CODE	VER NUM	TASK NUM	TASK TYPE C	START TIME	STORAGE ACTIVE	STORAGE KEPT	CPU TIME (SECS)	WAIT TIME (SECS)	TP READ LGTH	TP WRITE LGTH	NUM OF I/O	NUM OF DBCLS	NUM OF LVLS	NUM OF DBLVLS	NUM OF BUFBS	
QUED	0	18	ASSEM	7:54:11	5760	0	.8927	4.5380	0	0	1002	26	--	--	--	
CLOD	0	19	ASSEM	7:54:11	13056	0	.0552	.3059	0	0	10	94	--	--	--	
*** SUMMARY RECAP *** FOR PTERM: NONTERM						FOR DC SYSTEM VERSION #: 71 ON 30/09/99										
TOTAL NUMBER OF TASKS :						2	AVERAGE STORAGE USED :						9408			
TOTAL PHYSICAL I/O :						1012	AVERAGE STORAGE KEPT :						0			
TOTAL DATABASE CALLS :						120	AVERAGE TP I/O READ LENGTH :						0			
TOTAL ABNORMAL TERMINATIONS :						0	AVERAGE TP I/O WRITE LENGTH :						0			
TOTAL CPU TIME (HH.MM.SS):						0:00:01										
*** SUMMARY RECAP *** FOR PTERM: NONTERM						FOR DC SYSTEM VERSION #: 71 ON ALL DATES										
TOTAL NUMBER OF TASKS :						2	AVERAGE STORAGE USED :						9408			
TOTAL PHYSICAL I/O :						1012	AVERAGE STORAGE KEPT :						0			
TOTAL DATABASE CALLS :						120	AVERAGE TP I/O READ LENGTH :						0			
TOTAL ABNORMAL TERMINATIONS :						0	AVERAGE TP I/O WRITE LENGTH :						0			
TOTAL CPU TIME (HH.MM.SS):						0:00:01										
*** SUMMARY RECAP *** FOR PTERM: NONTERM						*** TOTALS ***										
TOTAL NUMBER OF TASKS :						2	AVERAGE STORAGE USED :						9408			
TOTAL PHYSICAL I/O :						1012	AVERAGE STORAGE KEPT :						0			
TOTAL DATABASE CALLS :						120	AVERAGE TP I/O READ LENGTH :						0			
TOTAL ABNORMAL TERMINATIONS :						0	AVERAGE TP I/O WRITE LENGTH :						0			
TOTAL CPU TIME (HH.MM.SS):						0:00:01										

4.3.14 PMARPT14: PTERM summary report

PMARPT14 contains one summary line for each task or CA-ADS dialog invoked from the physical terminal. The summary line is identified at the top of the report.

The fields in PMARPT14 are identical to those in Report 02. See 4.3.2, "PMARPT02: Task summary report" on page 4-17 for detailed field information.

Sample report:

REPORT NO. 14		COMPUTER ASSOCIATES INTL.										06/19/99 PAGE 5					
CA-IDMS/PM 15.0 CAGJF0		PTERM SUMMARY REPORT															
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.										DATA FROM: 6/19/99					
PTERM: PV56002																	
TASK CODE	VER NUM	TASK NUM	TASK TYPE	NUM TIMES EXEC	AVG STORAGE ACTIVE	AVG STORAGE KEPT	AVG CPU TIME (SECS)	AVG WAIT TIME (SECS)	AVG TP READ LNGLTH	AVG TP WRITE LNGLTH	AVG NUM OF I/O	AVG NUM OF DBCLS	AVG NUM OF LVLS	AVG NUM OF DBLVLS	AVG NUM OF BUFS		
B	0	1	ASSEM		9856	0	.0051	.5961	0	0	2	13	--	--	--		
BYE	0	1	ASSEM		9856	0	.0030	.0414	0	0	1	17	--	--	--		
DCMT	0	1	ASSEM		10624	94080	.0040	.3104	21	0	0	6	--	--	--		
FACTOTUM	1	17	ASSEM		1114	30328	.0007	.1713	131	124	0	2	--	--	--		
IDD	0	27	ASSEM	2	57064	75103	1.1287	47.4342	36	873	1355	1229	--	--	--		
OPER	0	2	ASSEM		16000	47296	.0388	150.0503	86	-5178	9	20	--	--	--		
PMAM	0	1	ASSEM		16512	6144	.0133	.7543	10	683	7	17	--	--	--		
PMIM	0	2	ASSEM		17408	10624	.0079	.1799	10	1153	4	14	--	--	--		
PMRM	0	1	ASSEM		26112	512	.0279	86.6013	46	3325	2	12	--	--	--		
PMWNRVR	1	145	ASSEM		28458	40575	.0038	.1578	4	1739	0	6	--	--	--		
S	0	1	ASSEM		10752	0	.0110	1.2497	23	0	13	35	--	--	--		
SIGNON	0	1	ASSEM		11520	768	.0159	3.7168	46	96	14	69	--	--	--		
*** SUMMARY RECAP ***		FOR PTERM: PV56002				FOR DC SYSTEM VERSION #: 56 ON 6/19/99											
		TOTAL NUMBER OF TASKS :				200		AVERAGE STORAGE USED :								29241	
		TOTAL PHYSICAL I/O :				36667		AVERAGE STORAGE KEPT :								43220	
		TOTAL DATABASE CALLS :				34346		AVERAGE TP I/O READ LENGTH :								20	
		TOTAL ABNORMAL TERMINATIONS :				2		AVERAGE TP I/O WRITE LENGTH :								1370	
		TOTAL CPU TIME (HH:MM:SS):				0:00:31											
*** SUMMARY RECAP ***		FOR PTERM: PV56002				FOR DC SYSTEM VERSION #: 56 ON ALL DATES											
		TOTAL NUMBER OF TASKS :				200		AVERAGE STORAGE USED :								29241	
		TOTAL PHYSICAL I/O :				36667		AVERAGE STORAGE KEPT :								43220	
		TOTAL DATABASE CALLS :				34346		AVERAGE TP I/O READ LENGTH :								20	
		TOTAL ABNORMAL TERMINATIONS :				2		AVERAGE TP I/O WRITE LENGTH :								1370	
		TOTAL CPU TIME (HH:MM:SS):				0:00:31											
*** SUMMARY RECAP ***		FOR PTERM: PV56002				*** TOTALS ***											
		TOTAL NUMBER OF TASKS :				200		AVERAGE STORAGE USED :								29241	
		TOTAL PHYSICAL I/O :				36667		AVERAGE STORAGE KEPT :								43220	
		TOTAL DATABASE CALLS :				34346		AVERAGE TP I/O READ LENGTH :								20	
		TOTAL ABNORMAL TERMINATIONS :				2		AVERAGE TP I/O WRITE LENGTH :								1370	

4.3.15 PMARPT15: System detail report

PMARPT15 contains one detail line for each DC/UCF system internal or driver task (DBRC, MASTER, line driver, print driver, and so on).

The fields in PMARPT15 are identical to those in Report 01. See 4.3.1, "PMARPT01: Task detail report" on page 4-15 for detailed field information.

Sample report:

REPORT NO. 15		CA-IDMS/PM 15.0		CAGJF0	COMPUTER ASSOCIATES INTL.				03/09/99		PAGE	1	
DC SYSTEM VERSION #: 71		COMPUTER ASSOCIATES INTERNATIONAL, INC.				SYSTEM TASK DETAIL REPORT		DATA FROM: 20/12/99					
TASK CODE	VER NUM	TASK NUM	TASK TYPE	C C	START TIME	STORAGE ACTIVE	STORAGE KEPT	CPU TIME (SECS)	WAIT TIME (SECS)	TP READ LNGLTH	TP WRITE LNGLTH	NUM OF I/O	NUM OF DBCLS
MASTER	0	0	SYSTM		11:07:52	0	6784	2.9463	.0000	1481	0	22	226
DBRC	0	1	SYSTM		11:07:52	0	1664	1.1223	40,042.1579	0	0	22	0
RU DRVR	0	2	SYSTM		11:07:52	0	0	.0127	957.4157	0	0	0	10
RU DRVR	0	3	SYSTM		11:07:52	0	0	.0144	956.9878	0	0	0	10
RU DRVR	0	4	SYSTM		11:07:52	0	0	.0042	956.9960	0	0	0	10
RU DRVR	0	5	SYSTM		11:07:52	0	0	.0103	956.7636	0	0	0	10
RU DRVR	0	6	SYSTM		11:07:52	0	0	.0122	956.3277	0	0	0	10
RU DRVR	0	7	SYSTM		11:07:52	0	0	.0120	955.8511	0	0	0	10
LOG DRVR	0	8	SYSTM		11:07:52	0	2688	.1080	40,070.1053	0	0	0	3
LOG DRVR	0	9	SYSTM		11:07:52	0	2688	.0578	40,071.5117	0	0	0	3
LOG DRVR	0	10	SYSTM		11:07:52	0	2688	.0155	40,071.5236	0	0	0	3
PM I/O	0	11	SYSTM		11:07:52	0	46848	.2834	40,071.6560	0	0	0	0
RHDCDEAD	0	13	SYSTM		11:07:52	0	0	.2568	953.1815	0	0	0	0
PM ROLL	0	12	SYSTM		11:07:52	0	0	.0107	955.6607	0	0	0	0
UCFLINE	0	14	SYSTM		11:07:55	0	0	.0177	949.5286	0	0	1	6
VTAM71	0	15	SYSTM		11:07:55	0	0	.1965	949.7334	0	0	0	8
DDSVTAM	0	16	SYSTM		11:07:58	0	0	.7569	945.9782	0	0	0	6
CCILINE	0	17	SYSTM		11:08:02	0	0	.0295	942.9384	0	0	0	6
HELOT	0	48	SYSTM		11:12:48	9344	0	.0171	57.9796	0	0	0	0
HELOT	0	97	SYSTM		11:15:34	1664	0	.0007	.0984	0	0	0	0
HELOT	0	105	SYSTM		11:16:03	9344	0	.0186	51.4737	0	0	0	0
HELOT	0	122	SYSTM		11:16:56	5888	0	.0374	58.8486	0	0	0	0
HELOT	0	164	SYSTM		11:19:12	7040	0	.0159	43.0944	0	0	0	0

4.3.16 PMARPT16: System summary report

PMARPT16 contains one summary line for each DC/UCF system internal or driver task (DBRC, MASTER, line driver, print driver, and so on).

The fields in PMARPT16 are identical to those in Report 02. See 4.3.2, "PMARPT02: Task summary report" on page 4-17 for detailed field information.

Sample report:

REPORT NO. 16		COMPUTER ASSOCIATES INTL.										06/19/99 PAGE	
CA-IDMS/PM 15.0 CAGJF0		SYSTEM TASK SUMMARY REPORT										1	
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.										DATA FROM: 6/19/99	
TASK CODE	VER NUM	NUM TIMES EXEC	TASK TYPE	NUM TIMES ABND	AVG STORAGE ACTIVE	AVG STORAGE KEPT	AVG CPU TIME (SECS)	AVG WAIT TIME (SECS)	AVG TP READ LNGTH	AVG TP WRITE LNGTH	AVG NUM OF I/O	AVG NUM OF DBCLS	
CCI56	0	1	SYSTEM		0	0	.0146	14,751.9287	0	0	0	6	
DBRC	0	1	SYSTEM		0	896	1.2293	53,819.5837	0	0	357	0	
JESRDR	0	1	SYSTEM		0	0	.0083	14,751.8655	0	0	0	9	
LOG DRVR	0	3	SYSTEM		0	1920	.1622	53,895.8342	0	0	0	3	
MASTER	0	1	SYSTEM		0	896	1.2618	.0000	4938	0	25	232	
PM I/O	0	1	SYSTEM		0	225152	1.5327	53,896.0931	0	0	0	0	
PM ROLL	0	1	SYSTEM		0	0	.0416	14,754.7059	0	0	0	0	
PRINT56	0	1	SYSTEM		0	0	.0062	14,751.9664	0	0	0	9	
PRNTTASK	0	1	SYSTEM		0	0	.0004	14,751.7031	0	0	0	0	
RHDCDEAD	0	1	SYSTEM		0	0	.6674	14,752.6397	0	0	0	0	
RU DRVR	0	6	SYSTEM		0	0	.0025	14,754.9674	0	0	0	7	
UCF56	0	1	SYSTEM		0	0	.0044	14,751.9453	0	0	0	9	
VTAM56	0	1	SYSTEM		0	0	.5764	14,751.4013	0	0	1	6	

4.3.17 PMARPT17: Database detail report

PMARPT17 contains one line for each task showing database statistics.

Sample report:

REPORT NO. 17 CA-IDMS/PM 15.0 CAGJF0 DC SYSTEM VERSION #: 71			COMPUTER ASSOCIATES INTL. DATABASE DETAIL REPORT COMPUTER ASSOCIATES INTERNATIONAL, INC.							30/09/99 PAGE 1			DATA FROM: 30/09/99		
TASK CODE	VER NUM	TASK NUM	TASK TYPE	RECS CURR OF R/U	RECS RQSTD	PAGES RQSTD	PAGES READ	PAGES WRITTEN	CALC RECS NO OFLOW	CALC RECS WITH OFLOW	VIA RECS NO OFLOW	VIA RECS WITH OFLOW	FRAGS STORED	SELECT LOCKS OF R/U	UPDATE LOCKS OF R/U
QUED	0	18	ASSEM	3	7	1005	1002	0	0	0	0	0	0	0	0
CLOD	0	19	ASSEM	23	50	26	10	0	0	0	0	0	0	0	0
FACTOTUM	1	20	ASSEM	0	0	0	0	0	0	0	0	0	0	0	0
FACTOTUM	1	21	ASSEM	0	0	0	0	0	0	0	0	0	0	0	0
S	0	22	ASSEM	3	7	6	3	0	0	0	0	0	0	0	0
FACTOTUM	1	23	ASSEM	0	1	1	1	0	0	0	0	0	0	0	0
C	0	24	ASSEM	3	7	4	1	0	0	0	0	0	0	0	0
FACTOTUM	1	25	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	26	ASSEM	3	4	3	1	0	0	0	0	0	0	0	0
FACTOTUM	1	27	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	28	ASSEM	3	4	3	1	0	0	0	0	0	0	0	0
FACTOTUM	1	29	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	30	ASSEM	3	5	3	1	0	0	0	0	0	0	0	0
FACTOTUM	1	31	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	32	ASSEM	3	4	3	1	0	0	0	0	0	0	0	0
FACTOTUM	1	33	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	34	ASSEM	3	7	3	1	0	0	0	0	0	0	0	0
FACTOTUM	1	35	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	36	ASSEM	3	7	3	0	0	0	0	0	0	0	0	0
FACTOTUM	1	37	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	38	ASSEM	3	7	3	0	0	0	0	0	0	0	0	0
FACTOTUM	1	39	ASSEM	0	0	0	0	0	0	0	0	0	0	0	0
FACTOTUM	1	40	ASSEM	0	0	0	0	0	0	0	0	0	0	0	0
FACTOTUM	1	41	ASSEM	0	0	0	0	0	0	0	0	0	0	0	0
C	0	42	ASSEM	3	9	4	1	0	0	0	0	0	0	0	0
FACTOTUM	1	43	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	44	ASSEM	3	5	3	1	0	0	0	0	0	0	0	0
FACTOTUM	1	45	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	46	ASSEM	3	4	3	1	0	0	0	0	0	0	0	0
FACTOTUM	1	47	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	48	ASSEM	3	4	3	1	0	0	0	0	0	0	0	0
FACTOTUM	1	49	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	50	ASSEM	3	5	3	1	0	0	0	0	0	0	0	0
FACTOTUM	1	51	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	52	ASSEM	3	7	3	0	0	0	0	0	0	0	0	0
FACTOTUM	1	53	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	54	ASSEM	3	7	3	0	0	0	0	0	0	0	0	0
FACTOTUM	1	55	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	56	ASSEM	3	7	3	0	0	0	0	0	0	0	0	0
FACTOTUM	1	57	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	58	ASSEM	0	0	0	0	0	0	0	0	0	0	0	0
HELOT	0	59	SYSTM	0	0	0	2	0	0	0	0	0	0	0	0
FACTOTUM	1	60	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	61	ASSEM	0	0	0	0	0	0	0	0	0	0	0	0
FACTOTUM	1	62	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	63	ASSEM	0	0	0	0	0	0	0	0	0	0	0	0
FACTOTUM	1	64	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0
DCMT	0	65	ASSEM	0	0	0	0	0	0	0	0	0	0	0	0
FACTOTUM	1	66	ASSEM	2	2	2	0	0	0	0	0	0	0	0	0

PMARPT17 fields:

Field	Description
Task Code	Task code or CA-ADS dialog name
Ver Num	Version number of the level-1 program executed for the task
Task Num	Sequential number assigned to the task at task initiation (also known as the task ID)
Task Type	Source language for the level-1 program for the task (ERUS for an external request unit)
Recs Curr of R/U	Number of records that became current of run unit as a result of FIND, STORE, or OBTAIN requests
Recs Rqstd	Number of records retrieved from the database as a result of processing requests issued by the run unit
Pages Rqstd	Number of pages requested by the DBMS for the run unit
Pages Read	Number of pages physically read on behalf of the run unit
Pages Written	Number of physical writes that occurred while the task was in control
CALC Recs No Oflow	Number of records stored using the CALC location mode that were stored on the target page
CALC Recs With Oflow	Number of records stored using the CALC location mode that were stored on a page other than the target page
VIA Recs No Oflow	Number of records stored using the VIA location mode that were stored on the target page
VIA Recs With Oflow	Number of records stored using the VIA location mode that were stored on a page other than the target page
Frag Stored	Number of record fragments stored
Select Locks Of R/U	Number of select locks held by the task
Update Locks Of R/U	Number of update locks held by the task

4.3.18 PMARPT18: Database summary report

PMARPT18 contains one summary line for each task type.

The fields in this report are the averages, sorted by task, of the fields in PMARPT17. See 4.3.17, "PMARPT17: Database detail report" on page 4-36 for detailed field information.

Sample report:

REPORT NO. 18		CA-IDMS/PM 15.0		CAGJF0		COMPUTER ASSOCIATES INTL.						06/19/99		PAGE 1	
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.						DATA FROM: 6/19/99							
TASK CODE	VER NUM	NUM TIMES EXEC	TASK TYPE	AVG RECS CURR OF R/U	AVG RECS RQSTD	AVG PAGES RQSTD	AVG PAGES READ	AVG PAGES WRITTEN	AVG CALC NO OFLOW	AVG CALC WITH OFLOW	AVG VIA NO OFLOW	AVG VIA WITH OFLOW	AVG FRAGS STORED	AVG SELECT LOCKS OF R/U	AVG UPDATE LOCKS OF R/U
B	0	1	ASSEM	5	17	13	2	0	0	0	0	0	0	0	0
BOM	1	12	ADS/O	43	65	51	7	0	0	0	0	0	0	0	0
BYE	0	1	ASSEM	5	17	13	1	0	0	0	0	0	0	0	0
CAP	1	7	ADS/O	93	116	103	11	0	0	0	0	0	0	0	0
CAR	1	13	ADS/O	66	82	73	10	0	0	0	0	0	0	0	0
CAS	1	37	ADS/O	28	62	51	11	0	0	0	0	0	0	0	0
CASCAS	1	6	ADS/O	47	81	67	14	0	0	0	0	0	0	0	0
CCC	1	7	ADS/O	111	147	119	10	0	0	0	0	0	0	0	0
CCI56	0	1	SYSTEM	3	5	3	0	0	0	0	0	0	0	0	0
CGL	1	13	ADS/O	35	57	47	12	0	0	0	0	0	0	0	0
CLIST	0	1	ASSEM	7	39	25	4	0	0	0	0	0	0	0	0
CLOD	0	1	UNDEF	48	131	60	5	0	0	0	0	0	0	0	0
COE	1	13	ADS/O	24	53	31	4	0	0	0	0	0	0	0	0
CPRD	1	11	ADS/O	63	98	70	10	0	0	0	0	0	0	0	0
CPRO	1	11	ADS/O	41	78	49	7	0	0	0	0	0	0	0	0
CPRS	1	12	ADS/O	22	67	29	4	0	0	0	0	0	0	0	0
CPRV	1	9	ADS/O	32	71	38	4	0	0	0	0	0	0	0	0
DBRC	0	1	SYSTEM	0	0	0	357	0	0	0	0	0	0	0	0
DCMT	0	7	ASSEM	4	11	6	2	0	0	0	0	0	0	0	0
DCUF	0	8	ASSEM	2	13	4	2	0	0	0	0	0	0	0	0
FACTOTUM	1	78	ASSEM	0	1	0	0	0	0	0	0	0	0	0	0
IDD	0	30	ASSEM	1094	1407	1249	1234	0	0	0	0	0	0	0	0
INV	1	13	ADS/O	21	54	28	4	0	0	0	0	0	0	0	0
JESRDR	0	1	SYSTEM	3	5	3	0	0	0	0	0	0	0	0	0
LOG DRVR	0	3	SYSTEM	0	0	0	0	0	0	0	0	0	0	1	0
MASTER	0	1	SYSTEM	108	157	115	25	0	0	0	0	0	0	0	0
MPS	1	10	ADS/O	71	108	79	8	0	0	0	0	0	0	0	0
MRP	1	10	ADS/O	27	66	36	5	0	0	0	0	0	0	0	0
OLP	0	6	ASSEM	3690	3702	4430	745	0	0	0	0	0	0	0	0
OLQ	0	25	ASSEM	126	219	345	199	2	1	0	3	0	0	0	0
OPER	0	9	ASSEM	3	11	5	2	0	0	0	0	0	0	0	0
PM I/O	0	1	SYSTEM	0	0	0	0	0	0	0	0	0	0	0	0
PM ROLL	0	1	SYSTEM	0	0	0	0	0	0	0	0	0	0	0	0
PMAM	0	1	ASSEM	2	15	12	7	0	0	0	0	0	0	0	0
PMIM	0	9	ASSEM	1	16	7	4	0	0	0	0	0	0	0	0
PMRM	0	2	ASSEM	4	19	14	7	0	0	0	0	0	0	0	0
PMWDRVR	1	187	ASSEM	0	2	2	0	0	0	0	0	0	0	0	0
PRINT56	0	1	SYSTEM	3	5	3	0	0	0	0	0	0	0	0	0
PRNTTASK	0	1	SYSTEM	0	0	0	0	0	0	0	0	0	0	0	0
QUED	0	1	ASSEM	7	32	2016	2008	0	0	0	0	0	0	0	0
RHDCDEAD	0	1	SYSTEM	0	0	0	0	0	0	0	0	0	0	0	0
RHDCSTTS	0	4	ASSEM	5	31	17	8	0	0	0	0	0	0	0	0
RU DRVR	0	6	SYSTEM	0	0	0	0	0	0	0	0	0	0	0	0
S	0	3	ASSEM	8	38	23	11	0	0	0	0	0	0	0	0
SDEL	0	1	UNDEF	7	34	18	2	0	0	0	0	0	0	0	0
SFC	1	11	ADS/O	42	80	51	7	0	0	0	0	0	0	0	0
SIGNON	0	1	ASSEM	18	70	37	14	0	0	0	0	0	0	0	0
UCF56	0	1	SYSTEM	3	5	3	0	0	0	0	0	0	0	0	0
USGADEL	1	1	UNDEF	4	30	16	2	0	0	0	0	0	0	0	0

4.3.19 PMARPT19: DC statistics detail report

PMARPT19 contains one line for each task showing DC/UCF system statistics.

Sample report:

REPORT NO. 19		COMPUTER ASSOCIATES INTL.										30/09/99		PAGE 1		
CA-IDMS/PM 15.0		DC STATISTICS DETAIL REPORT														
DC SYSTEM VERSION #: 71		COMPUTER ASSOCIATES INTERNATIONAL, INC.										DATA FROM: 30/09/99				
TASK CODE	VER NUM	TASK NUM	DC PRTY	PGMS CALLED	PGMS LOADED	PGM SPACE USED	GET STORAGE RQSTS	FREE STORAGE RQSTS	STORAGE ACTIVE	STORAGE KEPT	GET SCRATCH RQSTS	PUT SCRATCH RQSTS	DELETE SCRATCH RQSTS	GET QUEUE RQSTS	PUT QUEUE RQSTS	DELETE QUEUE RQSTS
QUED	0	18	250	1	1	0	14	11	5760	0	0	0	0	0	0	0
CLOD	0	19	250	6	2	6704	44	41	13056	0	0	0	0	0	0	0
FACTOTUM	1	20	251	0	0	0	5	2	0	0	0	0	0	0	0	0
FACTOTUM	1	21	251	0	0	0	3	1	0	0	0	0	0	0	0	0
S	0	22	100	1	1	0	16	13	9600	0	0	0	0	0	0	0
FACTOTUM	1	23	251	0	0	0	3	3	256	512	0	0	0	1	0	0
C	0	24	100	4	1	20280	15	9	17280	768	0	0	0	0	0	0
FACTOTUM	1	25	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	26	225	2	2	24360	14	11	9600	768	0	0	0	0	0	0
FACTOTUM	1	27	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	28	225	2	0	29984	14	11	9600	768	0	0	0	0	0	0
FACTOTUM	1	29	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	30	225	2	0	29984	14	11	9600	768	0	0	0	0	0	0
FACTOTUM	1	31	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	32	225	2	0	29984	14	11	9600	768	0	0	0	0	0	0
FACTOTUM	1	33	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	34	225	2	1	24360	15	11	12544	768	0	0	0	0	0	0
FACTOTUM	1	35	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	36	225	2	0	39600	15	11	12544	768	0	0	0	0	0	0
FACTOTUM	1	37	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	38	225	2	0	39600	17	11	12544	1536	0	1	0	0	0	0
FACTOTUM	1	39	251	3	0	17672	5	6	12032	1536	0	0	0	0	0	0
FACTOTUM	1	40	251	0	0	0	2	0	0	1536	1	1	0	0	0	0
FACTOTUM	1	41	251	0	0	0	2	4	0	768	1	1	3	0	0	0
C	0	42	100	4	0	20280	14	9	17024	768	0	0	0	0	0	0
FACTOTUM	1	43	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	44	225	2	0	29984	14	11	9600	768	0	0	0	0	0	0
FACTOTUM	1	45	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	46	225	2	0	29984	14	11	9600	768	0	0	0	0	0	0
FACTOTUM	1	47	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	48	225	2	0	29984	14	11	9600	768	0	0	0	0	0	0
FACTOTUM	1	49	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	50	225	2	0	29984	14	11	9600	768	0	0	0	0	0	0
FACTOTUM	1	51	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	52	225	2	0	39600	15	11	12544	768	0	0	0	0	0	0
FACTOTUM	1	53	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	54	225	2	0	39600	15	11	12544	768	0	0	0	0	0	0
FACTOTUM	1	55	251	3	0	17672	7	5	12288	768	0	0	0	0	0	0
DCMT	0	56	225	2	0	39600	17	11	12544	1536	0	1	0	0	0	0
FACTOTUM	1	57	251	3	0	17672	7	6	12288	1536	0	0	0	0	0	0
DCMT	0	58	225	1	0	24360	10	8	7296	1536	0	0	0	0	0	0
HELOT	0	59	200	0	0	0	48	30	8192	0	0	0	0	0	0	0
FACTOTUM	1	60	251	3	0	17672	7	5	12288	1536	0	0	0	0	0	0
DCMT	0	61	225	1	0	24360	10	8	7296	1536	0	0	0	0	0	0
FACTOTUM	1	62	251	3	0	17672	7	5	12288	1536	0	0	0	0	0	0
DCMT	0	63	225	1	0	24360	11	8	7296	1536	0	1	0	0	0	0
FACTOTUM	1	64	251	3	0	17672	7	6	12288	1536	0	0	0	0	0	0
DCMT	0	65	225	1	0	24360	10	8	7296	1536	0	0	0	0	0	0
FACTOTUM	1	66	251	3	0	17672	7	5	12288	1536	0	0	0	0	0	0

PMARPT19 fields:

Field	Description
Task Code	Task code or CA-ADS dialog name
Ver Num	Version number of the level-1 program executed for the task or CA-ADS dialog
Task Num	Sequential number assigned to the task at task initiation (also known as the task ID)
DC Prty	DC/UCF priority assigned to the task
Pgms Called	Number of programs called by the task; includes: <ul style="list-style-type: none"> ■ LINKs ■ XCTLs ■ Programs called by the system on behalf of the task
Pgms Loaded	Number of programs called that were not present in the program pool and that needed to be loaded
Pgm Space Used	Amount of program-pool space used by the task
Get Storage Rqsts	number of GET STORAGE (#GETSTG) requests issued by or on behalf of the task
Free Storage Rqsts	Number of FREE STORAGE (#FREESTG) requests issued by or on behalf of the task
Storage Active	High-water mark of storage used by the task; includes all types of storage
Storage Kept	Amount of USER KEPT or SHARED KEPT storage maintained by the DC/UCF system on behalf of the task; such storage can be held across a pseudo-converse; this does not include relocated storage for CA-ADS
Get Scratch Rqsts	Number of GET SCRATCH requests issued by or on behalf of the task
Put Scratch Rqsts	Number of PUT SCRATCH requests issued by or on behalf of the task
Delete Scratch Rqsts	Number of DELETE SCRATCH requests issued by or on behalf of the task

Field	Description
Get Queue Rqsts	Number of GET QUEUE requests issued by or on behalf of the task
Put Queue Rqsts	Number of PUT QUEUE requests issued by or on behalf of the task
Delete Queue Rqsts	Number of DELETE QUEUE requests issued by or on behalf of the task

4.3.20 PMARPT20: DC statistics summary report

PMARPT20 contains one line for each task showing DC/UCF system statistics.

The fields contained in this report are averages, by task and task priority, for the fields in PMARPT19. See 4.3.19, “PMARPT19: DC statistics detail report” on page 4-40 for detailed field information.

Sample report:

REPORT NO. 20		COMPUTER ASSOCIATES INTL.										06/19/99 PAGE 1				
CA-IDMS/PM 15.0		DC STATISTICS SUMMARY REPORT														
DC SYSTEM VERSION #: 56		COMPUTER ASSOCIATES INTERNATIONAL, INC.										DATA FROM: 6/19/99				
TASK CODE	VER NUM	NUM EXEC	DC PRTY	AVG PGMS CALLED	AVG PGMS LOADED	AVG PGM SPACE USED	AVG GET STORAGE RQSTS	AVG FREE STORAGE RQSTS	AVG STORAGE ACTIVE	AVG STORAGE KEPT	AVG GET SCRATCH RQSTS	AVG PUT SCRATCH RQSTS	AVG DELETE SCRATCH RQSTS	AVG GET QUEUE RQSTS	AVG PUT QUEUE RQSTS	AVG DELETE QUEUE RQSTS
B	0	1	100	1	1	0	15	28	9856	0	0	0	14	0	0	0
BOM	1	12	100	18	1	176046	30	25	30720	17109	0	0	0	0	0	0
BYE	0	1	100	1	0	520	15	14	9856	0	0	0	0	0	0	0
CAP	1	7	100	19	1	245543	34	28	41179	13769	1	1	1	0	0	0
CAR	1	13	100	21	1	217508	27	22	41945	16423	1	1	1	0	0	0
CAS	1	37	100	27	1	174759	78	73	33218	11537	0	0	0	0	0	0
CASCAS	1	6	100	25	2	160192	57	51	32576	11776	0	0	0	0	0	0
CCC	1	7	100	18	1	237961	31	26	54254	18341	0	0	0	0	0	0
CCI56	0	1	254	1	0	1528	15	6	0	0	0	0	0	0	0	0
CGL	1	13	100	21	1	176378	48	43	33398	17388	0	0	0	0	0	0
CLIST	0	1	100	4	1	19808	25	17	18176	640	0	0	0	0	0	0
CLOD	0	1	250	25	2	11632	122	119	25088	0	0	0	0	0	0	0
COE	1	13	100	20	1	188518	26	22	24930	17290	0	0	0	0	0	0
CPRD	1	11	100	21	1	194430	30	25	42519	16547	0	0	0	0	0	0
CPRO	1	11	100	21	1	232787	30	25	45452	16593	0	0	0	0	0	0
CPRS	1	12	100	21	0	194353	29	24	36597	17739	0	0	0	0	0	0
CPRV	1	9	100	21	0	186556	31	26	35584	15986	0	0	0	0	0	0
DBRC	0	1	255	0	0	0	353	289	0	896	0	0	0	0	0	0
DCMT	0	7	225	2	1	22583	20	13	13184	15013	0	0	0	0	0	0
DCUF	0	8	100	2	0	25634	14	8	10752	3552	0	0	0	0	0	0
FACTOTUM	1	78	251	0	0	969	3	2	1971	9849	0	0	0	0	0	0
IDD	0	30	100	12	1	116922	26	23	56508	68629	16	74	71	0	0	0
INV	1	13	100	18	0	183251	26	21	29588	15931	0	0	0	0	0	0
JESRDR	0	1	254	4	0	6256	15	11	0	0	0	0	0	0	0	0
LOG DRVR	0	3	253	1	0	0	7	1	0	1920	0	0	0	0	0	0
MASTER	0	1	255	19	10	0	323	269	0	896	0	0	0	1	0	0
MPS	1	10	100	22	1	286530	29	24	52659	15962	1	1	1	0	0	0
MRP	1	10	100	23	1	214511	36	31	37914	15616	1	1	1	0	0	0
OLP	0	6	100	4	0	14773	13	11	13568	11392	0	0	0	0	0	0
OLQ	0	25	100	21	1	201991	71	56	61322	8443	8	14	11	2	2	2
OPER	0	9	100	2	0	25977	221	116	12004	15801	0	0	0	0	0	0
PM I/O	0	1	253	2	2	0	41	594	0	225152	140	275	55	0	0	0
PM ROLL	0	1	253	0	0	0	28	26	0	0	0	0	0	0	0	0
PMAM	0	1	100	9	3	34776	25	14	16512	6144	0	0	0	0	0	0
PMIM	0	9	100	12	1	39740	32	21	19172	15317	0	0	0	0	0	0
PMRM	0	2	252	17	4	65324	65	60	34368	5760	0	0	0	0	0	0
PMWDRVR	1	187	100	7	0	43132	13	10	27220	35579	0	0	0	0	0	0
PRINT56	0	1	254	4	0	6256	16	11	0	0	0	0	0	0	0	0
PRNTTASK	0	1	253	0	0	0	1	0	0	0	0	0	0	0	0	0
QUED	0	1	250	1	1	0	33	22	6656	0	0	0	0	0	0	0
RHDCDEAD	0	1	253	0	0	0	3	0	0	0	0	0	0	0	0	0
RHDCSTTS	0	4	250	1	0	216	19	17	11776	0	0	0	0	0	0	0
RU DRVR	0	6	253	3	1	0	6	5	0	0	0	0	0	0	0	0
S	0	3	100	1	0	1435	23	19	10752	0	0	0	0	0	0	0
SDEL	0	1	100	11	1	7728	27	24	19328	0	0	0	0	0	0	0
SFC	1	11	100	20	1	198823	28	23	33699	17001	0	0	0	0	0	0
SIGNON	0	1	100	1	0	2152	39	35	11520	768	1	1	0	0	0	0
UCF56	0	1	254	4	0	6256	15	11	0	0	0	0	0	0	0	0
USGADEL	1	1	100	11	2	7728	30	23	17536	0	0	0	0	1	0	0

4.3.21 PMARPT31: Task wait summary report

PMARPT31 contains wait information for each task execution.

Sample report:

REPORT NO. 31 CA-IDMS/PM 15.0 CAGJF0 DC SYSTEM VERSION #: 71			COMPUTER ASSOCIATES INTL. TASK WAIT SUMMARY REPORT COMPUTER ASSOCIATES INTERNATIONAL, INC.										03/09/99 PAGE 1	
TASK CODE	TASK NUM	START TIME	CPU TIME (SECS)	DBIO WAITS	DBIO WAIT TIME (SECS)	AVG DBIO WAITTIME (SECS)	OTHR WAITS	OTHR I/O WAIT TIME (SECS)	AVG OTHR I/O TIME (SECS)	OTHR WAITS	OTHR WAIT TIME (SECS)	AVG OTHR WAITTIME (SECS)	TOTAL WAITS	TOTAL WAIT TIME (SECS)
MASTER		0 11:07:52	2.9463	19	8.4377	.4441	26	1.6240	.0625	1	.3900	.3900	46	10.4517
DBRC		1 11:07:52	1.1223											
RU DRVR		2 11:07:52	.0127											
RU DRVR		3 11:07:52	.0144											
RU DRVR		4 11:07:52	.0042											
RU DRVR		5 11:07:52	.0103											
RU DRVR		6 11:07:52	.0122											
RU DRVR		7 11:07:52	.0120											
LOG DRVR		8 11:07:52	.1080				50	6.1553	.1231				50	6.1553
LOG DRVR		9 11:07:52	.0578				47	4.8811	.1039				47	4.8811
LOG DRVR		10 11:07:52	.0155				13	1.6945	.1303				13	1.6945
PM I/O		11 11:07:52	.2834				84	3.1461	.0375	1	.1385	.1385	85	3.2846
PM ROLL		12 11:07:52	.0107				1	.0828	.0828				1	.0828
RHDCDEAD		13 11:07:52	.2568											
UCFLINE		14 11:07:55	.0177	1	.3814	.3814							1	.3814
VTAM71		15 11:07:55	.1965							120	194.6261	1.6219	120	194.6261
DDSVTAM		16 11:07:58	.7569				1	.0849	.0849	27	16.9681	.6284	28	17.0530
CCILINE		17 11:08:02	.0295											
QUED		18 11:08:12	1.2401	3	.4556	.1519	999	56.6762	.0567				1002	57.1318
CLOD		19 11:08:12	.0618	10	.8475	.0848				1	.0350	.0350	11	.8825
NOSNAP		20 11:08:16	.0104											
FACTOTUM		21 11:08:17	.0011											
FACTOTUM		22 11:08:50	.0011											
FACTOTUM		23 11:08:51	.0006											
S		24 11:08:56	.0212	3	.3722	.1241							3	.3722
FACTOTUM		25 11:08:57	.0032				1	.0374	.0374				1	.0374
C		26 11:09:15	.0219	1	.1375	.1375							1	.1375
FACTOTUM		27 11:09:29	.0031											
DCMT		28 11:09:29	.0258	1	.2310	.2310							1	.2310
FACTOTUM		29 11:09:30	.0034											
DCMT		30 11:09:30	.0169	1	.0209	.0209							1	.0209
FACTOTUM		31 11:09:30	.0034											
DCMT		32 11:09:30	.0061	1	.2980	.2980							1	.2980
FACTOTUM		33 11:09:30	.0030											
DCMT		34 11:09:30	.0064	1	.0190	.0190							1	.0190
FACTOTUM		35 11:09:30	.0030											
DCMT		36 11:09:30	.0065	1	.5303	.5303							1	.5303
FACTOTUM		37 11:09:31	.0026											
FACTOTUM		38 11:09:31	.0005											
D		39 11:09:35	.0133											
FACTOTUM		40 11:09:35	.0005											
D		41 11:12:30	.0048											
FACTOTUM		42 11:12:31	.0006											
D		43 11:12:37	.0144											
FACTOTUM		44 11:12:37	.0006											
C		45 11:12:46	.0104	1	.0774	.0774							1	.0774
FACTOTUM		46 11:12:48	.0031											
DCMT		47 11:12:48	.0049											
HELOT		48 11:12:48	.0171							1	.0406	.0406	1	.0406

PMARPT31 fields:

Field	Description
Task Code	Task code or CA-ADS dialog name
Task Num	Sequential number assigned to the task at task initiation (also known as the task ID)
Start Time	Time the task was initiated (<i>hh:mm:ss</i>)
CPU Time	Total CPU time for the task (<i>ss.ssss</i>)
DBIO Waits	Number of waits for database reads and writes
DBIO Wait Time	Amount of time spent waiting for database reads and writes (<i>ssss.ttt</i>)
Avg DBIO Wait Time	Average time spent waiting for a database read or write (<i>ssss.tttt</i>)
Oth I/O Waits	Number of waits for I/O other than database reads and writes; typically journal I/O
Oth I/O Wait Time	Amount of time spent waiting for I/O other than database reads and writes (<i>ssss.ttt</i>)
Avg Oth I/O Time	Average time spent waiting for I/O other than database reads and writes (<i>ssss.tttt</i>)
Oth Waits	Number of waits for resources other than I/O; should be investigated further using PMARPT36
Oth Wait Time	Amount of time spent waiting for resources other than I/O (<i>ssss.ttt</i>)
Avg Oth Wait Time	Average amount of time spent waiting for resources other than I/O (<i>ssss.tttt</i>)
Total Waits	Total of all waits
Total Wait Time	Total amount of time spent waiting (<i>ssss.ttt</i>)

4.3.22 PMARPT36: Task wait detail report

PMARPT36 contains one page of detailed wait statistics per task execution.

Note: To minimize output, always run this report with explicit selection criteria.

Sample report:

REPORT NO. 36	COMPUTER ASSOCIATES INTL.			10/20/00	PAGE		
CA-IDMS/PM 15.0 CAGJF0	TASKWAIT DETAIL REPORT						
DC SYSTEM VERSION #: 72	COMPUTER ASSOCIATES INTERNATIONAL, INC.			DATA FROM: 7/20/00			
TASK: DBCRUPD	TASKID: 277	START TIME: 5:36:56					
	--DBIO READ --	--JOURNAL READ --	--SCRATCH READ --	--LOG READ --			
WAITS	10	80					
WAIT TIME	.2762	.5240					
AVG TIME	.0276	.0066					
HIGHEST TIME	.0956	.0126					
	--DBIO WRITE--	--JOURNAL WRITE--	--SCRATCH WRITE--	--LOG WRITE--			
WAITS	1	2					
WAIT TIME	.0009	.0140					
AVG TIME	.0009	.0070					
HIGHEST TIME	.0009	.0122					
	--DOS PRIOR IO--	--JOURNAL BUFFER--	--SCR SINGLE THRD--	--LOG SINGLE THRD--			
WAITS		3		1			
WAIT TIME		.3338		.0053			
AVG TIME		.1113		.0053			
HIGHEST TIME		.2613		.0053			
	--DB BUFFER --	--PGM LOADS --	--QUEUE READ --	--LOG FULL --			
WAITS							
WAIT TIME							
AVG TIME							
HIGHEST TIME							
	--DBKEYS --	--LOADER SNGL THRD--	--QUEUE WRITE--	--EXTERNAL RU--			
WAITS	1						
WAIT TIME	1.5239						
AVG TIME	1.5239						
HIGHEST TIME	1.5239						
	--AREA ACCESS--	--DDS WRITES --	--TP READS--	--OTHER EXTRNL--			
WAITS							
WAIT TIME							
AVG TIME							
HIGHEST TIME							
	--STORAGE POOL --	--CHECKUSER --	--TP WRITES--	--OTHER INTRNL--			
WAITS							
WAIT TIME							
AVG TIME							
HIGHEST TIME							
	--PROGRAM POOL --	--DBGROUP --	--SHARED CACHE --				
WAITS			8				
WAIT TIME			.0051				
AVG TIME			.0006				
HIGHEST TIME			.0006				
DBKey Wait Record(s) for this TaskID							
DBCR.BRNCHEL	Area	PgGrp	DBKey-Page	Line	Holder	Type	Hold.TskID
		15	684538	1	DBCRUPD	TASK	274

PMARPT36 fields

Field	Description
Task	Task code or CA-ADS dialog name
Taskid	Sequential number assigned to the task at task initiation (also known as the task ID)
Start Time	Time the task was initiated (<i>hh:mm:ss</i>)
DBIO Read	Waits, wait time, average wait time, and highest wait time for database reads performed by or on behalf of the task
Journal Read	Waits, wait time, average wait time, and highest wait time for journal reads performed by or on behalf of the task (usually for rollback)
Scratch Read	Waits, wait time, average wait time, and highest wait time for scratch area reads performed by or on behalf of the task
Log Read	Waits, wait time, average wait time, and highest wait time for log area reads performed by or on behalf of the task
DBIO Write	Waits, wait time, average wait time, and highest wait time for database writes performed by or on behalf of the task
Journal Write	Waits, wait time, average wait time, and highest wait time for journal writes performed by or on behalf of the task
Scratch Write	Waits, wait time, average wait time, and highest wait time for scratch area writes performed by or on behalf of the task
Log Write	Waits, wait time, average wait time, and highest wait time for log area writes performed by or on behalf of the task
DOS Prior IO	Waits, wait time, average wait time, and highest wait time for prior I/O to complete (VSE/ESA only)
Journal Buffer	Waits, wait time, average wait time, and highest wait time because of full journal buffer (can indicate too few pages assigned to journal buffer)
Scr Singl Thrd	Waits, wait time, average wait time, and highest wait time for the scratch manager to finish single-threaded processing
Log Single Thrd	Waits, wait time, average wait time, and highest wait time for the log to finish single-threaded processing (if happening because of task or systems snaps, isolate and correct)
DB Buffer	Waits, wait time, average wait time, and highest wait time for database buffers
Pgm Loads	Waits, wait time, average wait time, and highest wait time for programs to be loaded by or on behalf of the task
Queue Read	Waits, wait time, average wait time, and highest wait time for queue area reads performed by or on behalf of the task

Field	Description
Log Full	Waits, wait time, average wait time, and highest wait time because log either full or being unloaded (frequent waits can indicate a problem with the log)
DBkeys	Waits, wait time, average wait time, and highest wait time for db-key waits (consistently high numbers can indicate a problem). Details on DBkeys are shown just behind all wait types.
Loader Sngl Thrd	Waits, wait time, average wait time, and highest wait time for the loader to finish single-threaded processing
Queue Write	Waits, wait time, average wait time, and highest wait time for queue writes issued by or on behalf of the task
External RU	Waits, wait time, average wait time, and highest wait time for external request units
Area Access	Waits, wait time, average wait time, and highest wait time for access to an area (check usage mode in this and other concurrently running programs)
DDS Writes	Waits, wait time, average wait time, and highest wait time for DDS I/O issued by or on behalf of the task
TP Reads	Waits, wait time, average wait time, and highest wait time for terminal writes
Other Extrnl	Waits, wait time, average wait time, and highest wait time for other meaningful external wait types, including the ICE, LRE, and user ECBs
Storage Pool	Waits, wait time, average wait time, and highest wait time to acquire storage for the task
Checkuser	Waits, wait time, average wait time, and highest wait time for an available check user subtask (OS/390 batch external run units only)
TP Writes	Waits, wait time, average wait time, and highest wait time for terminal writes
Other Intrnl	Waits, wait time, average wait time, and highest wait time for other meaningful internal wait types, including ENQUEUE, DEQUEUE, LTE, PDE, and TCE
Program Pool	Waits, wait time, average wait time, and highest wait time for access to a program or reentrant pool
DBGroup	Waits, wait time, average wait time, and highest wait time for a request issued from a front-end CV that want to start a database session, to get an answer from a back-end CV that volunteers to service the request

Field	Description
Shared Cache	Waits, wait time, average wait time, and highest wait time for a shared cache from the Coupling Facility

If waits on DBKeys occur, details about the DBKeys are shown.

Field	Description
Area	The DBKey's area name.
PgGrp	The DBKey's page group.
DBKey-Page	The DBKey's page number.
Line	The DBKey's line index.
Holder	The name of the holder of the DBKey lock.
Type	The type (TASK, LTE, or DDS) of the Holder field.
Hold.TskID	The task ID of the holder of the DBKey lock.

4.3.23 PMARPT80: Load balancing report (by day and central version)

PMARPT80 contains one set of summary lines for each hour reported, for both batch and online processing. You get one report for each day of processing. Each set of lines includes the following three statistics:

- The number of tasks or CA-ADS dialogs executed
- The amount of CPU used
- The number of physical disk I/Os issued

The relative lengths of the lines for different time periods reflect the relative loads for those periods.

If the report-generation job includes task selection parameters, this report can not reflect load balancing information accurately. Only data for those tasks that meet the selection criteria are considered in preparing the report.

4.3.25 PMARPT82: Load balancing (All CVs)

PMARPT82 contains one set of summary lines for each hour reported, for both batch and online processing, for all central versions. All days are compressed into one 24-hour graph.

The statistics are identical to those for Report 80. See 4.3.23, “PMARPT80: Load balancing report (by day and central version)” on page 4-49 for detailed field information.

4.3.26 PMARPT90: Machine-readable copy

Statistics extracted by Report 00 are output to either tape or disk.

When you run PMARPT90, you must run it with PMARPT00. Additionally, you can use the following parameters with PMARPT90:

- CV NUMBER
- DATE FORMAT
- REPORT FROM/THRU

4.3.27 PMARPT97: Summary recap report

PMARPT97 contains summary statistics for all tasks and CA-ADS dialogs reported. This report is sorted by day and by central version.

Sample report:

REPORT NO. 97 CA-IDMS/PM 15.0 CAGJF0	COMPUTER ASSOCIATES INTL. SUMMARY RECAP REPORT COMPUTER ASSOCIATES INTERNATIONAL, INC.			06/19/99 PAGE 1
TOTALS FOR DC SYSTEM VERSION 56 ON 6/19/99				
593 TOTAL TASKS	300 DC/UCF 195 ADS/0	78 FACTOTUM 20 SYSTEM	0 BATCH 0 ERUS	0 CICS 0 TPMON
0:51.39 TOTAL CPU TIME	0:00.087 AVG CPU TIME		759 STACK HIGHWATER	
0:51.39 TOTAL SYSTEM MODE	0:00.087 AVG SYSTEM MODE		4 TOTAL ABENDS	
0:00.00 TOTAL USER MODE	0:00.000 AVG USER MODE		50714 TOTAL DB I/O	
	13:33.716 AVG WAIT TIME			
0 TASKS NOT SELECTED	0 DC/UCF 0 ADS/0	0 FACTOTUM 0 SYSTEM	0 BATCH 0 ERUS	0 CICS 0 TPMON
593 TASKS SELECTED	300 DC/UCF 195 ADS/0	78 FACTOTUM 20 SYSTEM	0 BATCH 0 ERUS	0 CICS 0 TPMON
0:51.39 TOTAL CPU TIME	0:00.087 AVG CPU TIME		759 STACK HIGHWATER	
0:51.39 TOTAL SYSTEM MODE	0:00.087 AVG SYSTEM MODE		4 TOTAL ABENDS	
0:00.00 TOTAL USER MODE	0:00.000 AVG USER MODE		50714 TOTAL DB I/O	
	13:33.716 AVG WAIT TIME			
6776 TOT PGM CALL RQSTS	11.43 AVG PGM CALL RQSTS	87851 TOT DBCALLS	148.15 AVG DBCALLS	
281 TOT PGM LOAD RQSTS	.47 AVG PGM LOAD RQSTS	86283 TOT RECS RQSTED	145.50 AVG RECS RQSTED	
		66780 TOT RECS CURR R/U	112.61 AVG RECS CURR R/U	
17888 TOT GETSTG RQSTS	30.17 AVG GETSTG RQSTS	86348 TOT PAGES RQSTED	145.61 AVG PAGES RQSTED	
15867 TOT FREESTG RQSTS	26.76 AVG FREESTG RQSTS			
900 TOT GETSCR RQSTS	1.52 AVG GETSCR RQSTS	50714 TOT DB I/O	85.52 AVG DB I/O	
2897 TOT PUTSCR RQSTS	4.89 AVG PUTSCR RQSTS	50665 TOT DB READS	85.44 AVG DB READS	
2586 TOT DELSCR RQSTS	4.36 AVG DELSCR RQSTS	49 TOT DB WRITES	.08 AVG DB WRITES	
54 TOT GETQUE RQSTS	.09 AVG GETQUE RQSTS	24 TOT CALC NO OFLOW		
50 TOT PUTQUE RQSTS	.08 AVG PUTQUE RQSTS	0 TOT CALC W/ OFLOW		
46 TOT DELQUE RQSTS	.08 AVG DELQUE RQSTS	73 TOT VIA NO OFLOW		
		0 TOT VIA W/ OFLOW		
26062 TOT GETTIME RQSTS	43.95 AVG GETTIME RQSTS	0 TOT FRAGMENTS		
8356 TOT SETTIME RQSTS	14.09 AVG SETTIME RQSTS			

PMARPT97 fields: The following table describes the fields in PMARPT97. Interpret the word *tasks* to mean either task or CA-ADS dialog, as appropriate.

Information	Description
Number of tasks (total)	Total number of tasks executed
System information (total)	DC/UCF system information, including total and average CPU time
Task selection information	Total number of tasks selected and not selected.
System information (for selected tasks)	DC/UCF system information, including total and average CPU time
Database/data communications statistics (for selected tasks)	Daily totals and averages for all database and DC/UCF statistics

4.3.28 PMARPT99: Input processing summary report

PMARPT99 provides information on:

- **Task selection parameters.** For more information, refer to 4.2, “Requesting reports” on page 4-5 earlier in this chapter.
- **Input parameter processing.**
- **Input record processing statistics:**
 - Records read by PMARPT00
 - Records selected by PMARPT00
 - Records dropped by PMARPT00

For example, this category includes the earliest record read and the latest record read.

4.3 Report samples

Sample report:

REPORT NO. 99 CA-IDMS/PM 15.0	CAGJF0	COMPUTER ASSOCIATES INTL. INPUT PROCESSING SUMMARY REPORT COMPUTER ASSOCIATES INTERNATIONAL, INC.	30/09/99 PAGE 1
DATE FORMAT: DMY			

INPUT CARD PROCESSING			
CARDS READ:	1		
CARDS PROCESSED:	1		
COMMENT CARDS:	0		
CARD ERRORS:	0		
INPUT RECORD PROCESSING STATISTICS			
RECORDS READ BY PMARPT00			
# STAT RECS READ:	4,467		
# PMAM RECS READ:	4,179		
# PMIM RECS READ:	288		
EARLIEST REC READ:	07:54	ON 30/09/99	(99/274)
LATEST REC READ:	08:20	ON 30/09/99	(99/274)
BY RECORD TYPE			
TASK STATS	1,393		
TASK WAIT	0		
DBKEY	0		
RECORDS SELECTED BY PMARPT00			
# PMAM RECS SELECTED:	1,393		
EARLIEST REC SELECTD:	07:54	ON 30/09/99	(99/274)
LATEST REC SELECTED:	08:20	ON 30/09/99	(99/274)
BY RECORD TYPE			
TASK STATS	1,393		
TASK WAIT	0		
DBKEY	0		

REPORT NO. 99 CA-IDMS/PM 15.0	CAGJF0	COMPUTER ASSOCIATES INTL. INPUT PROCESSING SUMMARY REPORT COMPUTER ASSOCIATES INTERNATIONAL, INC.	30/09/99 PAGE 2
RECORDS DROPPED BY PMARPT00			
# PMAM RECS DROPPED:	0		
# PMIM RECS DROPPED:	288		
PROCESSING OF MULTIPART RECORDS			
#PMTASDS SEQ# 1	1,393		
#PMTASDS SEQ# 2	1,393		
#PMTASDS SEQ# 3	1,393		
#PMTAWDS SEQ# 1	0		
#PMTAWDS SEQ# 2	0		

Appendix A. Changing the Billing Group Code

- A.1 Overview A-3
- A.2 Changing billing groups online A-4
- A.3 Changing billing groups through a program A-5

A.1 Overview

The Application Monitor provides the information necessary for billing of the resources consumed by DC/UCF tasks, batch jobs, and CICS transactions. Chargeback/billing information is broken down by **billing group**.

You can change billing groups in one of the following ways:

- Online using the task code PMBILL
- Programmatically:
 - With a program call
 - Through a CA-ADS link

A.2 Changing billing groups online

Enter the task code **pmbill** to access a screen on which you can dynamically change the billing group code. After you exit this screen, all subsequent Application Monitor statistics records for the user will reflect the new billing group code.

The messages below are returned by PMBILL processing:

Billing Group changed to: xxxxxxxxxxxx. The Application Monitor has changed the billing group code to the value displayed.

Billing Group greater than 12 characters. You supplied a billing group code that was too long. Supply a code that is 12 characters or less and try again.

Billing Group unchanged. The monitor did not change the billing group. Another message will be displayed with this message, giving the reason.

Current Billing Group: xxxxxxxxxxxx. The monitor has determined from the signon element that the billing group code for the signed-on user is the value displayed. It will next ask for the new billing group code.

Enter new Billing Group. The monitor is requesting the new billing group code. Type the code and press ENTER.

No user currently signed on. You tried to change the billing group code, but are not signed on to a DC/UCF system. Sign on to a DC/UCF system and try again.

Sign on before setting Billing Group. See **No user currently signed on.** These messages always appear together.

Terminal error - please retry. An error occurred with the terminal message handling. Enter the request again.

►► For more information on the PMBILL task, see *CA-IDMS Performance Monitor User Guide*.

A.3 Changing billing groups through a program

An application program running under a DC/UCF system can maintain billing groups through a program call to PMAMBL10, a module supplied with the Application Monitor.

PMAMBL10 functions: Two functions are available with the PMAMBL10 interface:

- **Get Billing Group** returns the current billing group for the signed-on user
- **Set Billing Group** establishes a new billing group for the signed-on user

These functions are useful when:

- Your billing group changes during the day
- Your installation wishes to bill by program or application; using PMAMBL10, the billing assignment falls under program control

PMAMBL10 interface record: Programs that use PMAMBL10 require the following interface record (shown for COBOL):

```
01 BILLING-INTERFACE-RECORD.
  05 BILLING-RECORD-LENGTH PIC 9(4) USAGE COMP VALUE 24.
  05 BILLING-RECORD-VERSION PIC 9(4) USAGE COMP VALUE 1.
  05 BILLING-RECORD-FUNCTION PIC X(4) USAGE DISPLAY.
    88 GET-BILL VALUE 'GETB'.
    88 SET-BILL VALUE 'SETB'.
  05 BILLING-GROUP-RETCODE PIC X(4) USAGE DISPLAY.
    88 GOOD-RETURN VALUE 'RBOK'.
    88 NO-USER-SIGNED-ON VALUE 'RBNS'.
    88 BAD-RECORD VALUE 'RBBP'.
  05 BILLING-GROUP PIC X(12).
```

Description of fields

- BILLING-RECORD-LENGTH (binary) contains the length of the BILLING-INTERFACE-RECORD (always 24 for this release)
- BILLING-RECORD-VERSION (binary) contains the version number of the interface record (always 1 for this release)
- BILLING-RECORD-FUNCTION (display) determines the function requested: GETB, to return the current billing group into BILLING-GROUP; SETB, to set the billing group from the value in BILLING-GROUP
- BILLING-GROUP-RETCODE (display) contains the status of the last request, as shown in the table below
- BILLING-GROUP (display) contains the billing group last set or returned (depending on the value in BILLING-RECORD-FUNCTION)

Billing group return codes

Code	Meaning
RBOK	Processing was successfully completed
RBNS	No user was signed on, so no action was taken
RBBP	The interface record contains an invalid length (should be 24), version (should be 1), or function (should be GETB or SETB)

Passing control to PMAMBL10: When the program initializes fields in the interface record, it passes control to PMAMBL10. When the program receives control back from PMAMBL10, it examines the contents of BILLING-GROUP-RETCODE for the status of the requested operation.

COBOL example

```
PROCEDURE DIVISION.  
  .  
  .  
  .  
  MOVE 24 TO BILLING-RECORD-LENGTH.  
  MOVE 1 TO BILLING-RECORD-VERSION.  
  MOVE 'AUDITING ' TO BILLING-GROUP.  
  MOVE 'SETB' TO BILLING-RECORD-FUNCTION.  
  TRANSFER CONTROL TO 'PMAMBL10'  
  LINK USING BILLING-INTERFACE-RECORD.  
  .  
  .  
  .  
  IF GOOD-RETURN . . .
```

CA-ADS example

```
MOVE 'AUDITING ' TO BILLING-GROUP.  
MOVE 'SETB' TO BILLING-RECORD-FUNCTION.  
LINK TO PROGRAM 'PMAMBL10'  
  USING (BILLING-INTERFACE-RECORD).  
IF GOOD-RETURN . . .
```

Appendix B. Tailoring Screens, Task Codes, and Entry Options

- B.1 Overview B-3
- B.2 Customizing screen displays B-4
- B.3 Tailoring task codes B-7
- B.4 Task code entry options B-8
 - B.4.1 Syntax B-8
 - B.4.2 Parameters B-9
 - B.4.3 Examples B-9

B.1 Overview

This appendix provides direction for those who wish to modify Performance Monitor to better suit their installation's needs. Before making Performance Monitor available to the users at your site, you can modify certain aspects in order to:

- Ensure that users have screen displays that are meaningful for your site; you do this by tailoring screens
- Control which groups of users have access to certain Performance Monitor features (such as the SAVE command); you do this by assigning separate task codes
- Invoke Performance Monitor, overriding certain #PMOPT specifications; you do this by using task code entry options

B.2 Customizing screen displays

Performance Monitor allows you to modify screens and save them in the dictionary. This capability is controlled by the SITESAV and USERSAV parameters of the #PMGEN macro:

- USERSAV allows Performance Monitor users to save test versions (that is, versions other than 1) of monitor screens
- SITESAV allows Performance Monitor users to save all versions (including version 1) of monitor screens

The following pages tell you how to modify and save version 1 of Performance Monitor screens.

What you can do: You can modify the format of Performance Monitor screen displays (using EDIT and SORT) and save the screen load modules in the dictionary (using SAVE). For example, you can use these facilities to change the display size or the column order in the display. You can also specify that a certain field be displayed in descending order so that you can easily detect high activity.

Note: You should not edit screens whose window format is FIXED. To determine a window's format, use the ADMIN screen.

How to do it: To tailor a Performance Monitor screen, perform the following steps:

1. Sign on to a DC/UCF system.
2. Set a session test version of 1 by using the DCUF TEST command.
3. Set a session default dictionary by using the DCUF SET DICTNAME command.
This name should specify the dictionary to which users are signed on while using Performance Monitor.
4. Sign on to Performance Monitor.
5. Make the screen the default window, as described in the *CA-IDMS Performance Monitor User Guide*.
6. Make any required changes using the EDIT and SORT windows; for more information on EDIT and SORT, see the *CA-IDMS Performance Monitor User Guide*.
7. Issue the SAVE command to request that Performance Monitor save the load module for the modified screen in the dictionary.

A Performance Monitor subtask saves the load module in the session default dictionary. Because the session version was set to 1 (in Step 2), the load module is saved as version 1.

Tip: Because a subtask performs the save processing, all other active windows are available to you while the save occurs.

Restrictions: In order to save revised screen displays in this way (that is, in order to save version 1), the SITESAV parameter of the #PMGEN macro must specify YES. This macro is included in each of the three Performance Monitor initialization modules and is described in Part One of this manual.

Sample scenario: You can follow the steps below to tailor the screens for a component of Performance Monitor (Realtime Monitor, Interval Monitor, or Application Monitor):

1. Generate the #PMGEN macro with SITESAV=YES for the component whose screens are being changed, then complete the Performance Monitor installation
2. Modify and save screen displays specific to your site
3. Recode the #PMGEN macro with SITESAV=NO, then reassemble and relink the initialization module for the component

Notes and suggestions: Observe these following guidelines:

- Users signed on to DC with a default version of 1 will use the modified screen displays automatically. To use the modified displays, ensure that your default DC version number (modified by the DCUF TEST command) is 1.
- Users signed on to DC under a test version (a version other than 1) use screen displays saved under their test version. If there is no screen display load module for their test version, they use the modified display.
- In order to ensure use among multiple dictionaries, you may want to punch the saved load module to a load library. This library must be ahead of the Performance Monitor load library in the CDMSLIB concatenation or search sequence.
- In order to allow certain users to always have site save capability, you may choose to implement separate task codes. This is explained in B.3, “Tailoring task codes” on page B-7 later in this appendix.

Example of tailoring and saving screens: The example below shows how to tailor and save the Active User Tasks screen used by the Realtime Monitor.

1. Press [PF4] to make the Active User Task Detail screen the default window.
2. Type **edit** at the CMD--> prompt.

```
PM-R15.0 SYSTEM71      Computer Associates Intl. V71      99.274 12:02:56.34
CMD-->                                     Window : 02
                                           Refresh: 10
                                           >
02 Active User Task Detail
Task      Task      Current Task Link      Task      Ecblst
Number   Code      Program  Pri Level User_ID  Lterm_ID Status  Address
1796     PMRM      PMWDRVR  252          VL71001  RUN      00000000
```

Press [Enter] to display the Edit Window Format screen.

3. Press [PF6] to display the screen for editing the window fields.

```

PM-R15.0 SYSTEM99      Computer Associates Intl  V72      99.170 15:34:18.54
CMD-->                                     Window : 02
                                           Refresh: 10
                                           i
02 EDIT Window Format - PF6 for Window Edit
      Field Field
Command Order Number Field Name      Required Displayable
      Field Field
-         1         1 Task_Number      YES        YES
-         2         2 Task_Code        YES        YES
-         3         3 Current_Program  YES        YES
-         4         4 Priority          NO         YES
-         5         5 Link_Levels      NO         YES
-         6         6 User_ID          NO         YES
-         7         7 Lterm_ID        NO         YES
-         8         8 Task_Status      NO         YES
    
```

- To move a field, enter **m** in the Command column of the field to move, and enter **a** in the Command column of the field that you want the moved field to follow. For example, to move Task_Status after Priority, enter **m** in the Command column for Task_Status, **a** in the Command column for Priority, and then press [Enter]. Repeat this step for each field you want to move.

►► For more information on using the EDIT facility, refer to *CA-IDMS Performance Monitor User Guide*.

- Press [PF3] to display the Active User Task Detail screen and verify the changes.
- To save the changes permanently, type **save** at the CMD--> prompt and press [Enter].

Performance Monitor tells you the module name, version, and dictionary for the saved load module for the screen.

```

PM-R15.0 SYSTEM99      Computer Associates Intl  V72      99.170 15:34:18.54
CMD-->                                     Window : 02
                                           Refresh: 10
02 Save Site - Window Overrides
The Window Load Module will be saved according to the following information:
  Module: PMRTMTSK
  Version: 98
  Dictname:
  Dictnode:
PRESS PF6 IN ORDER TO CONFIRM SAVE.
    
```

- Press [PF6] to save the load module and version shown.

Performance Monitor displays the message **SAVE OF WINDOW DEFINITION IS IN PROGRESS**. When the save is complete and the screen refreshes (either automatically or when you press [Enter]), Performance Monitor displays the message **SAVE OF WINDOW DEFINITION SUCCESSFULLY COMPLETED**.

B.3 Tailoring task codes

You can generate separate versions of the PM_{xx}INIT modules for users with a higher security class. For example, you could have one set of task codes for DBAs and one set of task codes for programmers. The DBAs are allowed to save modules in the dictionary; programmers are not.

To assign a separate set of task codes, perform the following steps:

1. Code separate initialization modules (PMRTINIT, PMIMINIT, or PMAMINIT). The #PMGEN macros contained in each of these modules should specify the abilities that you want the higher class of users to have. For example, you may want to specify SITESAV=YES and SORT=YES.

Note: Use the modules supplied with your Performance Monitor installation tape as models. You can change any of the #PMGEN parameters except PROGRAM.

2. Link edit the initialization module, but specify a name other than PM_{xx}INIT in the link-edit NAME statement (for example, PMRTINI2).

Be sure to include an ENTRY INITEP1 statement in the link-edit stream.

3. Using the system generation compiler, define the new initialization program and a task to invoke the program. For example, task code PMRM2 could invoke program PMRTINI2.

You could assign a higher security class to this task code so that it is available only to certain users. For prototype system generation statements, see the PM-STATEMENTS module, which is automatically installed into the specified source library by the Performance Monitor installation process.

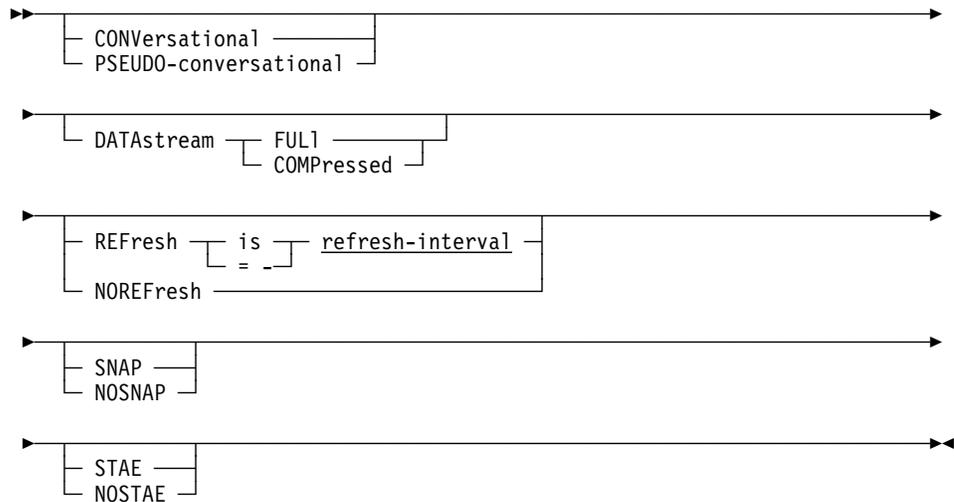
B.4 Task code entry options

Task-code entry options are established at runtime. You use them to override session and installation options when initiating a Performance Monitor session.

Note: These options are not explained in the *CA-IDMS Performance Monitor User Guide*. As system administrator, you decide whether to make these options available to your site's Performance Monitor users.

You can override certain session and installation options by invoking Performance Monitor components using task-code entry options. These overrides apply to the current Performance Monitor component session only. Syntax and parameter descriptions follow.

B.4.1 Syntax



B.4.2 Parameters

CONVersational/PSEUDO-conversational

Specifies whether the Performance Monitor component runs in a conversational or a pseudo-conversational manner.

The Realtime Monitor is the only Performance Monitor component that should run conversationally.

DATAstream FULL/COMPRESSED

Specifies whether all fields or only modified fields are transmitted to and from the terminal.

REFRESH is refresh-interval/NOREFresh

Specifies either a refresh interval or that refresh processing should not occur. *Refresh-interval* is a number between 1 and 99.

SNAP/NOSNAP

Specifies whether the system should perform a snap dump in the event of Performance Monitor abnormal termination processing.

STAE/NOSTAE

Specifies whether the STAE option is enabled or disabled for your Performance Monitor session.

B.4.3 Examples

The following example invokes the Realtime Monitor and specifies that it is to run pseudo-conversationally:

```
V84 ENTER NEXT TASK CODE:  
pmrm pseudo
```

Note: When you run the Realtime Monitor pseudo-conversationally, Performance Monitor still refreshes the screen.

You can use more than one task-code entry option at a time. The following example invokes the Realtime Monitor and specifies that it is to run with NOSTAE and a refresh interval of 30 seconds:

```
V84 ENTER NEXT TASK CODE:  
pmrm nostae refresh 30
```


Appendix C. Performance Monitor Record Descriptions

C.1	Format of Performance Monitor records	C-4
C.2	Format of SMF records	C-5
C.3	Performance Monitor record descriptions	C-6
C.3.1	#PMARADS (PMIM area wait)	C-7
C.3.2	#PMBUFDS (PMIM buffer wait)	C-10
C.3.3	#PMCDMDS (PMIM CDMSLIB wait)	C-12
C.3.4	#PMDBGDS (PMIM DBGroup wait)	C-13
C.3.5	#PMDBKDS (db-key wait)	C-14
C.3.6	#PMHDRDS (Performance Monitor record header)	C-16
C.3.7	#PMINSDS (PMIM interval statistics)	C-18
C.3.8	#PMINTDS (PMIM interval wait summary)	C-20
C.3.9	#PMJRLDS (PMIM journal wait)	C-25
C.3.10	#PMLNEDS (PMIM line wait)	C-27
C.3.11	#PMPGMDS (PMIM program pool)	C-29
C.3.12	#PMRUSDS (PMIM run units information)	C-31
C.3.13	#PMSMHDS (SMF header)	C-33
C.3.14	#PMSM4DS (SMF type 4 record)	C-34
C.3.15	#PMS30 (SMF type 30 record)	C-37
C.3.16	#PMSTGDS (PMIM storage pool data)	C-42
C.3.17	#PMSTLDS (DC log records data)	C-44
C.3.18	#PMSVXDS (ERE extension)	C-45
C.3.19	#PMTASDS (PMAM task)	C-46
C.3.20	#PMTAWDS (PMAM task wait)	C-52
C.3.21	#PMXLIDS (PMIM data sharing XES list structure information)	C-56
C.3.22	#PMXLKDS (PMIM data sharing XES lock structure information)	C-57
C.3.23	#PMXMSDS (PMIM data sharing XCF group member information)	C-58
C.3.24	#PMYPEDS (PMIM storage type wait)	C-59

About this appendix: This appendix documents the Performance Monitor record layouts. It provides the following information:

- Format of Performance Monitor records
- Format of SMF records (OS/390 only)
- Record descriptions (DSECTs) for all records used for statistics collection

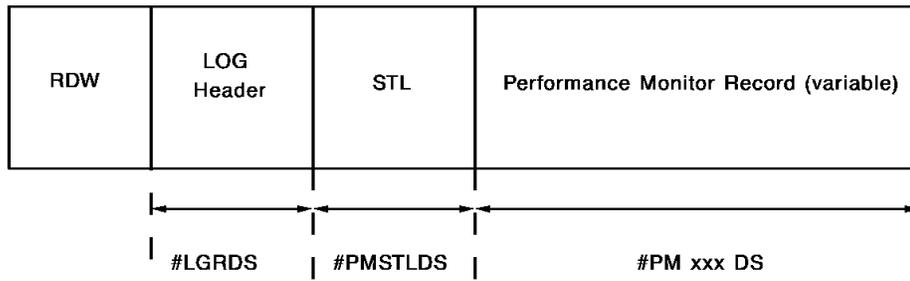
C.1 Format of Performance Monitor records

The record format shown below applies to Performance Monitor records stored in the following files:

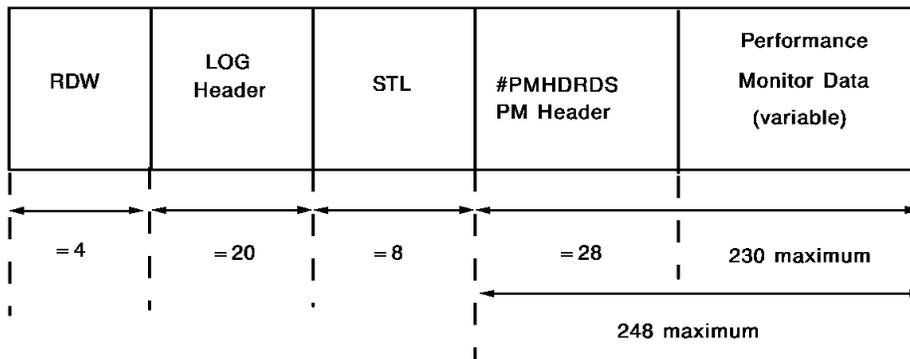
- DC/UCF system log file
- Archive file
- PMSMFEX extract file
- PMxRPT90 output tape or disk file

The bottom portion lists the log-record component lengths and, where appropriate, the DSECT field that indicates the component length.

General format

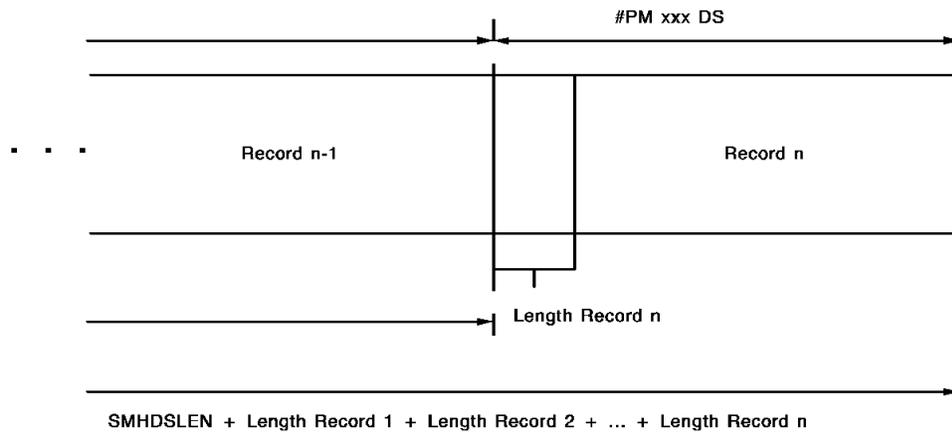
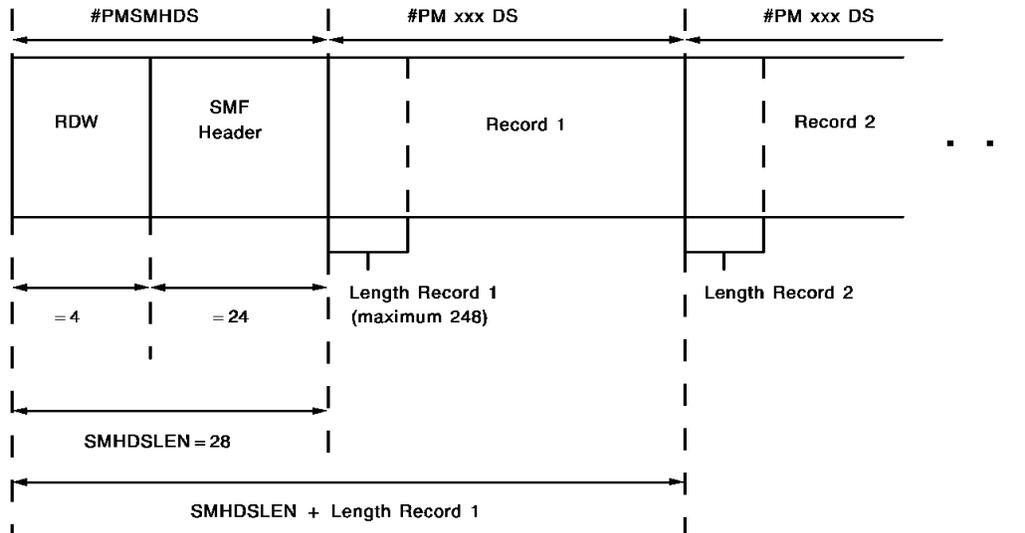


Detailed format



C.2 Format of SMF records

The record format shown below applies to records stored in the SMF file as user SMF record type *nnn*. SMF records contain both Application Monitor and Interval Monitor records. The data portion of Performance Monitor records is of variable length.



C.3 Performance Monitor record descriptions

The remainder of this appendix lists the DSECTs for all records used by the Application Monitor and the Interval Monitor for statistics collection:

- Area wait
- Buffer wait
- CDMSLIB wait
- DBGroup wait
- Db-key wait
- Interval statistics
- Interval wait
- Journal wait
- Line wait
- Log record text portion
- Performance Monitor record header
- Program pool wait
- Run unit information record
- SMF type 4 record (OS/390 only)
- SMF type 30 record (OS/390 only)
- SMF user record header (OS/390 only)
- Storage type wait
- Storage pool information
- Task
- Task wait

C.3.1 #PMARADS (PMIM area wait)

Offset	Value	
		<pre> COPY #PMARADS ***** *** *** *** #PMARA - PMIM AREA WAIT RECORD *** *** *** ***** * * ONE AREA RECORD FOR EACH AREA/FILE COMBINATION IN DMCL * * EX: ONE FILE W/ TWO AREAS WILL HAVE 2 * ONE AREA IN 3 FILES WILL HAVE 3 * *-----* * </pre>
000000		<pre> #PMARA DSECT 12/05/95 * *-----* * </pre>
000000		<pre> ARAHDR DS 0H RECORD HEADER * </pre>
000000		<pre> ARALEN DS H RECORD LENGTH (INCLUSIVE) </pre>
000002		<pre> ARARTYPE DS X RECORD TYPE </pre>
	00001	<pre> ARA\$TYPE EQU 1 ..PMIM AREA WAIT RECORD </pre>
000003		<pre> ARASEQ# DS X SEQUENCE NUMBER </pre>
000004		<pre> ARAVR# DS X RECORD VERSION </pre>
	00001	<pre> ARA\$VER EQU 1 ..CURRENT VERSION </pre>
000005		<pre> DS XL3 **RESERVED** * </pre>
000008		<pre> DS F ** RESERVED ** </pre>
00000C		<pre> ARASDATE DS PL4 INTERVAL START DATE (00YYDDF) </pre>
000010		<pre> ARASTIME DS F INTERVAL START TIME (10**-4 SEC) </pre>
000014		<pre> ARAEDATE DS PL4 INTERVAL END DATE (00YYDDF) </pre>
000018		<pre> ARAETIME DS F INTERVAL END TIME (10**-4 SEC) * </pre>
	0001C	<pre> ARAHDRLN EQU *-ARAHDR LENGTH OF HEADER * *-----* * </pre>
	0001C	<pre> ARADATA EQU * START OF AREA DATA * *-----* * </pre>
		<pre> * PART 1 - ARASEQ#=1 * *-----* * </pre>
00001C		<pre> ARANAME DS CL27 NAME OF AREA </pre>
000037		<pre> ARAFILE DS CL27 FILENAME OF AREA </pre>
000052		<pre> ARABUFR DS CL18 BUFFER FOR AREA </pre>
000064		<pre> ARAFPERA DS H # FILES FOR AREA * </pre>
		<pre> IE: HOW MANY OF THESE RECS? </pre>
000066		<pre> ARAPGGRP DS H PAGE GROUP </pre>
000068		<pre> ARAKYFMT DS F DBKEY FORMAT </pre>
00006C		<pre> ARAATYP DS CL2 TYPE OF AREA (DPRATYP) </pre>
00006E		<pre> ARASTATS DS CL2 AREA STATUS INTVL START (DPRCURST) </pre>
000070		<pre> ARASTATE DS CL2 AREA STATUS INTVL END </pre>
000072		<pre> DS H ** RESERVED ** * </pre>
000074		<pre> ARASHCNM DS CL16 NAME OF SHARED CACHE </pre>
000084		<pre> DS F ** RESERVED ** </pre>

C.3 Performance Monitor record descriptions

```

*
*-----
*
000088      ARAWBKTS DS  0F          START OF WAIT TIME STATISTICS
*
000088      ARADBIR  DS  0F          DBIO READ WAIT
000088      ARADBIRT DS  F          ....SUM OF WAIT TIMES (10***-4 SEC)
00008C      ARADBIRH DS  F          ....HIGHEST WAIT TIME (10***-4 SEC)
000090      ARADBIR# DS  F          ....# WAITS
*
000094      ARADBIW  DS  0F          DBIO WRITE WAIT
000094      ARADBIWT DS  F          ....SUM OF WAIT TIMES (10***-4 SEC)
000098      ARADBIWH DS  F          ....HIGHEST WAIT TIME (10***-4 SEC)
00009C      ARADBIW# DS  F          ....# WAITS
*
0000A0      ARAFCBX  DS  0F          DBIO WAIT ON A PRIOR I/O (DOS)
0000A0      ARAFCBXT DS  F          ....SUM OF WAIT TIMES (10***-4 SEC)
0000A4      ARAFCBXH DS  F          ....HIGHEST WAIT TIME (10***-4 SEC)
0000A8      ARAFCBX# DS  F          ....# WAITS
*
0000AC      ARADBFR  DS  0F          DB BUFFER WAIT
0000AC      ARADBFRT DS  F          ....SUM OF WAIT TIMES (10***-4 SEC)
0000B0      ARADBFRH DS  F          ....HIGHEST WAIT TIME (10***-4 SEC)
0000B4      ARADBFR# DS  F          ....# WAITS
*
0000B8      ARBMES  DS  0F          BMESECB WAIT
0000B8      ARBMEST  DS  F          ....SUM OF WAIT TIMES (10***-4 SEC)
0000BC      ARBMESH  DS  F          ....HIGHEST WAIT TIME (10***-4 SEC)
0000C0      ARBMES#  DS  F          ....# WAITS
*
0000C4      ARBMEX  DS  0F          BMEXECB WAIT
0000C4      ARBMEXT  DS  F          ....SUM OF WAIT TIMES (10***-4 SEC)
0000C8      ARBMEXH  DS  F          ....HIGHEST WAIT TIME (10***-4 SEC)
0000CC      ARBMEX#  DS  F          ....# WAITS
*
0000D0      ARADBKY  DS  0F          DBKEY WAIT
0000D0      ARADBKYT DS  F          ....SUM OF WAIT TIMES (10***-4 SEC)
0000D4      ARADBKYH DS  F          ....HIGHEST WAIT TIME (10***-4 SEC)
0000D8      ARADBKY# DS  F          ....# WAITS
*
0000DC      ARASHC  DS  0F          SHARED CACHE WAIT
0000DC      ARASHCT  DS  F          ....SUM OF WAIT TIMES (10***-4 SEC)
0000E0      ARASHCH  DS  F          ....HIGHEST WAIT TIME (10***-4 SEC)
0000E4      ARASHC#  DS  F          ....# WAITS
*
*-----
*
0000E8      DS  0F
000E8      ARA1DSL N EQU  *-#PMARA      PART1 - LENGTH OF RECORD
*
*
00008      ARA#BKTS EQU  8              PART1 - # WAIT BUCKETS
000CC      ARA1DTL N EQU  ARA1DSL N-ARAHDLN PART1 - LENGTH OF RECORD DATA
*
*-----
*
0000E8      0001C      ORG  ARADATA
*
*-----
*
*          PART 2 - ARASEQ#=2
*
*-----
*
00001C      ARA#ACWT DS  F              # AREA ACCESS WAITS

```

C.3 Performance Monitor record descriptions

```

000020          ARA#ACCS DS   F           # AREA ACCESSES
000024          ARA#WRIT DS   F           # PHYSICAL WRITES FROM AFM
000028          ARA#READ DS   F           # PHYSICAL READS FROM AFM
00002C          ARA#BFHT DS   F           # BUFFER HITS FOR AREA RQSTS
000030          ARA#PFHT DS   F           # PREFETCH HITS
*
000034          ARA#ESAR DS   F           # READS FROM ESA CACHE
000038          ARA#ESAF DS   F           # FOUND IN ESA CACHE
00003C          ARA#ESAW DS   F           # WRITE TO ESA CACHE
000040          ARA#SHCR DS   F           # READS FROM SHARED CACHE
000044          ARA#SHCF DS   F           # FOUND IN SHARED CACHE
000048          ARA#SHCW DS   F           # WRITE TO SHARED CACHE
00004C          ARA#SHCX DS   F           # WRITE THAT FAILED
*
*-----
*
000050          DS   0F
00050          ARA2DSLN EQU  *--#PMARA      PART2 - LENGTH OF RECORD
*
*
00034          ARA2DTLN EQU  ARA2DSLN-ARAHDRLN PART2 - LENGTH OF RECORD DATA
*
*-----
*
000050          000E8          ORG   ,
*
000E8          ARAMXLEN EQU  ((*--#PMARA+3)/4)*4  LENGTH OF LARGEST PART
*
*-----

```

C.3.2 #PMBUFDS (PMIM buffer wait)

```

COPY #PMBUFDS
*****
***                                     ***
***      #PMBUF - PMIM BUFFER WAIT RECORD      ***
***                                     ***
*****
*
*      ONE BUFFER RECORD FOR EACH BUFFER POOL IN DMCL
*
*-----*
*

```

Offset	Value			
000000		#PMBUF	DSECT	12/13/95
		*		

		*		
000000		BUFHDR	DS 0H	RECORD HEADER
		*		
000000		BUFLEN	DS H	RECORD LENGTH (INCLUSIVE)
000002		BUFRTYPE	DS X	RECORD TYPE
	00002	BUF\$TYPE	EQU 2	..PMIM BUFFER WAIT RECORD
000003		BUFSEQ#	DS X	SEQUENCE NUMBER (ALWAYS 1)
000004		BUFVER#	DS X	RECORD VERSION
	00001	BUF\$VER	EQU 1	..CURRENT VERSION
000005			DS XL3	** RESERVED **
		*		
000008			DS F	** RESERVED **
00000C		BUFSDATE	DS PL4	INTERVAL START DATE (00YYDDF)
000010		BUFSTIME	DS F	INTERVAL START TIME (10**-4 SEC)
000014		BUFEDATE	DS PL4	INTERVAL END DATE (00YYDDF)
000018		BUFETIME	DS F	INTERVAL END TIME (10**-4 SEC)
		*		
	0001C	BUFHDRLN	EQU *-BUFHDR	HEADER LENGTH
		*		

		*		
	0001C	BUFDATA	EQU *	START OF JOURNAL DATA
		*		
00001C		BUFNAME	DS CL18	NAME OF BUFFER POOL
00002E			DS XL2	** RESERVED ** PERF/109
000030		BUFPGSIZ	DS F	SIZE OF BUFFER PAGE
000034		BUF#DEFN	DS F	# BUFFER PAGES DEFINED (IN DMCL)
000038		BUF#INUS	DS F	# BUFFER PAGES IN USE
		*		
00003C		BUF#RQST	DS F	# REQUESTS TO BUFFER POOL
000040		BUF#FLSH	DS F	# BUFFER FLUSHES IN BUFFER POOL
000044		BUF#WRIT	DS F	# PHYSICAL WRITES FROM BCRST
000048		BUF#READ	DS F	# PHYSICAL READS FROM BCRST
00004C		BUF#PFND	DS F	# PAGES FOUND IN BUFFER POOL
000050		BUF#PFCA	DS F	# PAGES FOUND IN CACHE (ESA/SHA-CA)
000054		BUF#PFET	DS F	# PAGES FOUND IN PREFETCH BUFFER
		*		

		*		
000058		BUFWBKTS	DS 0F	START OF WAIT TIME STATISTICS
		*		
000058		BUFDBIR	DS 0F	DB READ WAIT
000058		BUFDBIRT	DS F	....SUM OF WAIT TIMES (10**-4 SEC)
00005C		BUFDBIRH	DS F	....HIGHEST WAIT TIME (10**-4 SEC)
000060		BUFDBIR#	DS F	....# WAITS

C.3 Performance Monitor record descriptions

```

*
000064      BUFDBIW DS 0F          DB WRITE WAIT
000064      BUFDBIWT DS F          ....SUM OF WAIT TIMES (10**-4 SEC)
000068      BUFDBIWH DS F          ....HIGHEST WAIT TIME (10**-4 SEC)
00006C      BUFDBIW# DS F          ....# WAITS
*
000070      BUFBMES DS 0F          BMESECB WAIT
000070      BUFBMEST DS F          ....SUM OF WAIT TIMES (10**-4 SEC)
000074      BUFBMESH DS F          ....HIGHEST WAIT TIME (10**-4 SEC)
000078      BUFBMES# DS F          ....# WAITS
*
00007C      BUFBMEX DS 0F          BMESECB WAIT
00007C      BUFBMEXT DS F          ....SUM OF WAIT TIMES (10**-4 SEC)
000080      BUFBMEXH DS F          ....HIGHEST WAIT TIME (10**-4 SEC)
000084      BUFBMEX# DS F          ....# WAITS
*
000088      BUFDBFR DS 0F          DB BUFFER WAIT
000088      BUFDBFRT DS F          ....SUM OF WAIT TIMES (10**-4 SEC)
00008C      BUFDBFRH DS F          ....HIGHEST WAIT TIME (10**-4 SEC)
000090      BUFDBFR# DS F          ....# WAITS
*
000094      DS 0F          ** RESERVED **
000094      DS F          ....SUM OF WAIT TIMES (10**-4 SEC)
000098      DS F          ....HIGHEST WAIT TIME (10**-4 SEC)
00009C      DS F          ....# WAITS
*
-----
*
000A0      BUFDLEN EQU ((*-#PMBUF+3)/4)*4  LENGTH OF RECORD
*
-----
*
00005      BUF#BKTS EQU 5          # WAIT BUCKETS
00084      BUFDLEN EQU BUFDLEN-BUFDRLN  LENGTH OF RECORD DATA
*
-----

```

C.3.3 #PMCDMDS (PMIM CDMSLIB wait)

Offset	Value	
		COPY #PMCDMDS

		*** #PMCDM - PMIM CDMSLIB WAIT RECORD ***

		*
000000		#PMCDM DSECT 03:24:03 03/03/88
		*

000000		* CDMHDR DS 0H RECORD HEADER *
000000		CDMLEN DS H RECORD LENGTH (INCLUSIVE)
000002		CDMRTYPE DS X RECORD TYPE
000003	00003	CDM\$TYPE EQU 3 ..PMIM CDMSLIB WAIT RECORD
000004		CDMSEQ# DS X SEQUENCE NUMBER (ALWAYS 1)
		CDMVER# DS X RECORD VERSION
000005	00001	CDM\$VER EQU 1 ..CURRENT VERSION
		DS XL3 ** RESERVED **
		* DS F ** RESERVED **
000008		CDMSDATE DS PL4 INTERVAL START DATE (00YYDDF)
00000C		CDMSTIME DS F INTERVAL START TIME (10**-4 SEC)
000010		CDMEDATE DS PL4 INTERVAL END DATE (00YYDDF)
000014		CDMETIME DS F INTERVAL END TIME (10**-4 SEC)
000018		* CDMHDLN EQU *-CDMHDR HEADER LENGTH *
	0001C	*-----*
		* CDMDATA EQU * START OF CDMSLIB DATA *
00001C		CDMNUMB DS H NUMBER OF CDMSLNN (CDMSLIB=0)
00001E		DS H * UNUSED

000020		* CDMWBKTS DS 0F START OF WAIT TIME STATISTICS *
000020		CDMREAD DS 0F CDMSLIB I/O WAIT
000020		CDMREADT DS F ....SUM OF WAIT TIMES (10**-4 SEC)
000024		CDMREADH DS F ....HIGHEST WAIT TIME (10**-4 SEC)
000028		CDMREAD# DS F# WAITS

	0002C	* CDMDSLEN EQU ((*-#PMCDM+3)/4)*4 LENGTH OF RECORD *

	00001	* CDM#BKTS EQU 1 # WAIT BUCKETS
00010	00010	CDMDTLEN EQU CDMDSLEN-CDMHDLN LENGTH OF RECORD DATA

C.3.4 #PMDBGDS (PMIM DBGroup wait)

Offset	Value	
		COPY #PMDBGDS

		*** #PMDBG - PMIM DBGROUP WAIT RECORD ***

		*
000000		#PMDBG DSECT 12/04/95
		*

		*
000000		DBGHDR DS 0H RECORD HEADER
		*
000000		DBGLEN DS H RECORD LENGTH (INCLUSIVE)
000002		DBGRTYPE DS X RECORD TYPE
	0000C	DBG\$TYPE EQU 12 ..PMIM DBGROUP WAIT RECORD
000003		DBGSEQ# DS X SEQUENCE NUMBER (ALWAYS 1)
000004		DBGVER# DS X RECORD VERSION
	00001	DBG\$VER EQU 1 ..CURRENT VERSION
000005		DS XL3 ** RESERVED **
		*
000008		DS F ** RESERVED **
00000C		DBGSDATE DS PL4 INTERVAL START DATE (00YYDDF)
000010		DBGSTIME DS F INTERVAL START TIME (10**-4 SEC)
000014		DBGEDATE DS PL4 INTERVAL END DATE (00YYDDF)
000018		DBGETIME DS F INTERVAL END TIME (10**-4 SEC)
		*
	0001C	DBGHDRLN EQU *-DBGHDR HEADER LENGTH
		*

		*
	0001C	DBGDATA EQU * START OF DBGROUP DATA
		*
00001C		DBGNAME DS CL8 NAME OF DBGROUP
000024		DBG#REQ DS F TOTAL NUMBER OF REQUESTS
		*
000028		DBGNODNM DS CL8 NAME OF SERVER NODE
000030		DBGNOD#R DS F NUMBER OF REQUESTS PROCESSED
		*

		*
000034		DBGWBKTS DS 0F START OF WAIT TIME STATISTICS
		*
		*
000034		DBGDBG DS 0F DBGROUP WAIT
000034		DBGDBGT DS F ...SUM OF WAIT TIMES (10**-4 SEC)
000038		DBGDBGH DS F ...HIGHEST WAIT TIME (10**-4 SEC)
00003C		DBGDBG# DS F ...# WAITS
		*

		*
	00040	DBGDSLEN EQU *-#PMDBG LENGTH OF RECORD
		*

		*
	00001	DBG#BKTS EQU 1 # WAIT BUCKETS
	00024	DBGDTLEN EQU DBGDSLEN-DBGHDRLN LENGTH OF RECORD DATA
		*

C.3.5 #PMDBKDS (db-key wait)

```

                                COPY #PMDBKDS
*****
***                               ***
***   #PMDBK - TASK DBKEY WAIT RECORD   ***
***                               ***
*****
*
*
*   UP TO MAX # SPECIFIED IN #PMOPT PER TASK
*
*-----
*
Offset           Value
000000             #PMDBK   DSECT                03:24:14 03/03/88  12/27/94
*
*-----
*
000000             DBKHDR   DS    0H                RECORD HEADER
*
000000             DBKLEN   DS    H                RECORD LENGTH      (INCLUSIVE)
000002             DBKRTYPE DS    X                RECORD TYPE
000003             00012    DBK$TYPE EQU    18        ..PMAM TASK DBKEY WAIT RECORD
000004             DBKSEQ#  DS    X                SEQUENCE NUMBER
000004             DBKVER#  DS    X                RECORD VERSION
000005             00001    DBK$VER EQU    1         ..CURRENT VERSION
000005             DS    XL3                ** RESERVED **
*
000008             DBKTSKID DS    F                TASK ID
00000C             DBKSDATE DS    PL4             TASK START DATE      (00YYDDF)
000010             DBKSTIME DS    F                TASK START TIME      (10**-4 SEC)
000014             DBKEDATE DS    PL4             TASK END DATE        (00YYDDF)
000018             DBKETIME DS    F                TASK END TIME        (10**-4 SEC)
*
0001C             DBKHDRLN EQU  *-DBKHDR          HEADER LENGTH
*
*-----
*
0001C             DBKDATA  EQU  *                START OF TASK DBKEY WAIT DATA
*
00001C             DBKDBKEY DS    F                DBKEY BEING WAITED ON
000020             DBKAREA  DS    CL27            AREA CONTAINING DBKEY
00003B             DBKFILE  DS    CL27            FILE CONTAINING DBKEY
*
000056             DBKOWNER DS    X                DBKEY OWNER TYPE
000080             00080    DBKDCE EQU  X'80'      ..DCE IS OWNER
000040             00040    DBKLTE EQU  X'40'      ..LTE IS OWNER
000020             00020    DBKHTE EQU  X'20'      ..HTE IS OWNER
000057             DS    X                ** RESERVED **
*
000058             DBKPGGRP DS    H                AREA'S PAGE GROUP   (DPRPGRP)
00005A             DS    XL2                ** RESERVED **     PERF/116
00005C             DBKKYFMT DS    F                DBKEY FORMAT        (DPRDBKFM)
*
000060             DBKLTYP  DS    F                LOCK TYPE           (FROM RLTH)
*
*-----
*
000064             DBKVDATA DS    0F                VARIABLE HOLDER INFORMATION
*
*   HOLDER IS ANOTHER TASK
000064             DBKHDTID DS    F                TASK ID OF HOLDER

```

C.3 Performance Monitor record descriptions

```

000068          DBKHDPGM DS   CL8          PROGRAM HOLDING DBKEY
000070          DBKHDTSK DS   CL8          TASK NAME OF HOLDER
*
000078          00064          ORG   DBKVDATA
*          HOLDER IS ANOTHER LTERM (LONGTERM LOCKS)
000064          DS   F          ** RESERVED **
000068          DBKHDLTE DS   CL8          LTERM OF HOLDER
*
000070          00064          ORG   DBKVDATA
*          HOLDER IS A DDS TASK
000064          DS   F          ** RESERVED **
000068          DBKHTLTE DS   CL8          DDS FRONTEND LTERM OF HOLDER
000070          DBKHTNOD DS   CL8          DDS FRONTEND NODENAME OF HOLDER
*
000078          00078          ORG
00014          00014          DBKVLEN EQU  *-DBKVDATA          LENGTH OF VARIABLE DATA
*
*-----
*
000078          DBKWAIT DS   F          DBKEY WAIT TIME          (10**-4 SEC)
*
*-----
*
0007C          0007C          DBKDSLEN EQU  ((*-#PMDBK+3)/4)*4          LENGTH OF RECORD
*
*-----
*
00060          00060          DBKDTLEN EQU  DBKDSLEN-DBKHDLN          LENGTH OF RECORD DATA
*
*-----

```

C.3.6 #PMHDRDS (Performance Monitor record header)

```

                                COPY #PMHDRDS
*****
***                               ***
*** #PMHDR - PERFORMANCE MONITOR RECORD HEADER ***
***                               ***
*****
*
*   DESCRIBES THE HEADER PORTION OF EACH RECORD WRITTEN
*   BY THE PERFORMANCE MONITOR TO THE DC LOG OR TO SMF
*
*   FOR RECORDS WRITTEN TO THE DC LOG AND FOR RECORDS
*   REFORMATTED BY THE PMRSMFEX REPORT
*   THE RECORD HEADER BEGINS AT FIELD PMSFIXE
*   (SEE #PMSTLDS DSECT)
*
*   FOR RECORDS WRITTEN TO SMF, THE RECORD HEADER
*   FOR THE FIRST PERFMON RECORD IN THE SMF
*   RECORD BEGINS AT FIELD SMFHDATA
*   (SEE #PMSMHS DSECT)
*
*-----
*
000000          00000 0001C #PMHDR DSECT 11/24/95
*
*-----
*
000000          PMHLEN DS H RECORD LENGTH (INCLUSIVE)
*
000002          PMHRTYPE DS X PERFORMANCE MONITOR RECORD TYPE
*
          00001 PMH$ARA EQU 1 ..PMIM AREA WAIT RECORD
          00002 PMH$BUF EQU 2 ..PMIM BUFFER WAIT RECORD
          00003 PMH$CDM EQU 3 ..PMIM CDMSLIB WAIT RECORD
          00004 PMH$INS EQU 4 ..PMIM INTERVAL STAT RECORD
          00005 PMH$INT EQU 5 ..PMIM INTERVAL WAIT RECORD
          00006 PMH$JRL EQU 6 ..PMIM JOURNAL WAIT RECORD
          00007 PMH$LNE EQU 7 ..PMIM LINE WAIT RECORD
          00008 PMH$PGM EQU 8 ..PMIM PROGRAM POOL WAIT RECORD
          00009 PMH$RUS EQU 9 ..PMIM RUNUNIT STAT RECORD
          0000A PMH$STG EQU 10 ..PMIM STORAGE POOL STAT RECORD
          0000B PMH$YPE EQU 11 ..PMIM STORAGE TYPE WAIT RECORD
          0000C PMH$DBG EQU 12 ..PMIM DBGROUP WAIT RECORD
          0000D PMH$XLK EQU 13 ..PMIM DSG XESLOCK WAIT RECORD
          0000E PMH$XLI EQU 14 ..PMIM DSG XESLIST WAIT RECORD
          0000F PMH$XMS EQU 15 ..PMIM DSG XCF MSG WAIT RECORD
*
          00010 PMH$TAS EQU 16 ..PMAM TASK INFORMATION RECORD
          00011 PMH$TAW EQU 17 ..PMAM TASK WAIT RECORD
          00012 PMH$DBK EQU 18 ..PMAM DBKEY WAIT RECORD
*
          00001 PMHIMLO EQU 1 LOW PMIM REC TYPE
          0000F PMHIMHI EQU 15 HIGH PMIM REC TYPE
          00010 PMHAMLO EQU 16 LOW PMAM REC TYPE
          00012 PMHAMHI EQU 18 HIGH PMAM REC TYPE
*
*-----
*
000003          PMHSEQ# DS X SEQUENCE NUMBER
*
000004          PMHVER# DS X RECORD VERSION #
000005          DS XL3 ** RESERVED **
*
*-----

```

C.3 Performance Monitor record descriptions

	*				00590000
000008		PMHTSKID DS	0F	PMAM - TASKID	00600000
000008			DS 0F	PMIM - RESERVED	00610000
000008			DS F		00620000
	*				00630000
	*	PMAM - FOLLOWING ARE FOR THE TASK			00640000
	*	PMIM - FOLLOWING ARE FOR THE INTERVAL			00650000
	*				00660000
00000C		PMHSDATE DS	PL4	START DATE	(00YYDDDF) 00670000
000010		PMHSTIME DS	F	START TIME	(10**-4 SEC) 00680000
	*				00690000
000014		PMHEDATE DS	PL4	END DATE	(00YYDDDF) 00700000
000018		PMHETIME DS	F	END TIME	(10**-4 SEC) 00710000
	*				00720000
	*	-----			00730000
	*				00740000
0001C		PMHDSLEN EQU	*-#PMHDR	HEADER LENGTH	00750000
	*				00760000
	*	-----			00770000

C.3.7 #PMINSDS (PMIM interval statistics)

```

                                COPY #PMINSDS
*****
***                               ***
***   #PMINS - PMIM INTERVAL STATISTICS RECORD   ***
***                               ***
*****
*
*   ONE INTERVAL STATS RECORD PER INTERVAL
*
*-----*
*
Offset           Value
000000             #PMINS   DSECT                05/04/88 22:24:15
*
*-----*
*
000000             INSHDR   DS    0H                RECORD HEADER
*
000000             INSLN   DS    H                RECORD LENGTH      (INCLUSIVE)
000002             INSRTRY DS    X                RECORD TYPE
000003             00004   IN$TYPE EQU    4                ..PMIM INTERVAL STAT RECORD
000004             IN$SEQ# DS    X                SEQUENCE NUMBER      (ALWAYS 1)
000004             IN$VER# DS    X                RECORD VERSION
000005             00001   IN$VER EQU    1                ..CURRENT VERSION
000005             DS    XL3                ** RESERVED **
*
000008             DS    F                ** RESERVED **
00000C             INSSDATE DS    PL4            INTERVAL START DATE   (00YYDDDF)
000010             IN$TIME DS    F                INTERVAL START TIME   (10**-4 SEC)
000014             IN$EDATE DS    PL4            INTERVAL END DATE     (00YYDDDF)
000018             IN$ETIME DS    F                INTERVAL END TIME     (10**-4 SEC)
*
0001C             IN$HDLN EQU  *-INSHDR          HEADER LENGTH
*
*-----*
*
0001C             IN$DATA EQU  *                START OF INTERVAL STATISTIC DATA
*
00001C             IN$INTSZ DS    F                SIZE OF INTERVAL     (10**-4 SEC)
*
000020             IN$#TSTR DS    F                # TASKS STARTED IN INTERVAL
000024             IN$#TEND DS    F                # TASKS ENDED DURING INTERVAL
000028             IN$#TACS DS    F                # TASKS ACTIVE AT INTVL START
00002C             IN$#TACE DS    F                # TASKS ACTIVE AT INTVL END
000030             IN$#TABN DS    F                # TASKS ABENDED DURING INTVL
000034             IN$#TOUT DS    F                # TASKS TIMED OUT (SINGLE ECB)
000038             IN$#TOUL DS    F                # TASKS TIMED OUT (ECB LIST)
00003C             IN$#MXTK DS    F                # TIMES AT MAX TASK IN INTVL
*
000040             IN$#HASH DS    F                # DBKEY HASH TBL ENTRIES (CCESTCHT)
000044             IN$#SYN DS    F                # DBKEY SYN TBL ENTRIES (CCESTCST)
*
*-----*
*
*   INTERVAL DC STATISTICS
*
000048             IN$PGMCL DS    F                # PGMS CALLED        (STCPGMCL)
00004C             IN$PGMLD DS    F                # PGMS LOADED        (STCPGMLD+STRPGLRP+
*                                     STRXPLDS+STRXPLRP)
000050             IN$TRMRD DS    F                # TERMINAL READS     (STCTRMRD)
000054             IN$TRMWR DS    F                # TERMINAL WRITES    (STCTRMRW)

```

C.3 Performance Monitor record descriptions

000058	INSTRMER DS	F	# TERMINAL ERRORS	(STCTRMER)
00005C	INSSTGGT DS	F	# STORAGE GETS	(STCSTGGT)
000060	INSSTGFR DS	F	# STORAGE FREES	(STCSTGFR)
000064	INSSCRGT DS	F	# SCRATCH GETS	(STCSCRGT)
000068	INSSCRPT DS	F	# SCRATCH PUTS	(STCSCRPT)
00006C	INSSCRDL DS	F	# SCRATCH DELETES	(STCSCRDL)
000070	INSQUEGT DS	F	# QUEUE GETS	(STCQUEGT)
000074	INSQUEPT DS	F	# QUEUE PUTS	(STCQUEPT)
000078	INSQUEDL DS	F	# QUEUE DELETES	(STCQUEDL)
00007C	INSSVRQS DS	F	# DC SERVICE RQSTS	(STCSVRQS)
000080	INSDBRQS DS	F	# DB SERVICE RQSTS	(STCDBRQS)
000084	INSTIMSY DS	F	SYSTEM MODE CPU TIME	(STCTIMSY)
000088	INSTIMUS DS	F	USER MODE CPU TIME	(STCTIMUS)
	*			
00008C	DS	2F	** RESERVED **	
	*			

	*			
00094	INSDSLEN EQU	$((\ast-\#PMINS+3)/4)\ast4$	LENGTH OF LOGREC	
	*			

	*			
00078	INSDTLEN EQU	INSDSLEN-INSHDRLN	LENGTH OF RECORD DATA	
00000	INS#BKTS EQU	0		
	*			

C.3.8 #PMINTDS (PMIM interval wait summary)

Offset	Value	
		COPY #PMINTDS

		*** #PMINT - PMIM INTERVAL WAIT SUMMARY DATA ***

		* ONE INTERVAL WAIT RECORD PER INTERVAL *

		*
000000	00000 000F4	#PMINT DSECT 09/30/99
		*-----
		* INTHDR DS 0H RECORD HEADER *
000000		INTLEN DS H RECORD LENGTH (INCLUSIVE)
000002		INTRTYPE DS X RECORD TYPE
	00005	INT\$TYPE EQU 5 ..PMIM INTERVAL WAIT RECORD
000003		INTSEQ# DS X SEQUENCE NUMBER
000004		INTVER# DS X RECORD VERSION
	00001	INT\$VER EQU 1 ..CURRENT VERSION
000005		DS XL3 ** RESERVED **
		* DS F ** RESERVED **
000008		INTSDATE DS PL4 INTERVAL START DATE (00YYDDF)
00000C		INTSTIME DS F INTERVAL START TIME (10**-4 SEC)
000010		INTEDATE DS PL4 INTERVAL END DATE (00YYDDF)
000014		INTETIME DS F INTERVAL END TIME (10**-4 SEC)
000018		*-----
	0001C	INTHDLN EQU *-INTHDR HEADER LENGTH
		*-----
	0001C	INTDATA EQU * START OF INTERVAL SUMMARY DATA
		*-----
		* PART1 - INTSEQ#=1 *
		*-----
00001C		INT#TSTR DS F # TASKS STARTED IN INTERVAL
000020		INT#TEND DS F # TASKS ENDED DURING INTERVAL
000024		INTTIMSY DS F SYSTEM MODE CPU TIME (10**-4 SEC)
000028		INTTIMUS DS F USER MODE CPU TIME (10**-4 SEC)
00002C		DS F ** RESERVED **
		*-----
		* PART1 - START OF WAIT TIME BUCKETS *
000030		INT1BKTS DS 0F
		* INTDBIR DS 0F DBIO READ WAIT *
000030		INTDBIRT DS F ....SUM OF WAIT TIMES (10**-4 SEC)
000030		INTDBIRH DS F ....HIGHEST WAIT TIME (10**-4 SEC)
000034		INTDBIR# DS F# WAITS
		* INTDBIW DS 0F DBIO WRITE WAIT *
00003C		INTDBIWT DS F ....SUM OF WAIT TIMES (10**-4 SEC)

C.3 Performance Monitor record descriptions

000040	INTDBIWH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000044	INTDBIWH# DS	F	....# WAITS
	*		
000048	INTFCBX DS	0F	DBIO WAITING ON PRIOR I/O (DOS)
000048	INTFCBXT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
00004C	INTFCBXH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000050	INTFCBX# DS	F	....# WAITS
	*		
000054	INTDBFR DS	0F	DB BUFFER WAIT
000054	INTDBFRT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000058	INTDBFRH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
00005C	INTDBFR# DS	F	....# WAITS
	*		
000060	INTJRLR DS	0F	JRNL READ WAIT
000060	INTJRLRT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000064	INTJRLRH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000068	INTJRLR# DS	F	....# WAITS
	*		
00006C	INTJRLW DS	0F	JRNL WRITE WAIT
00006C	INTJRLWT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000070	INTJRLWH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000074	INTJRLW# DS	F	....# WAITS
	*		
000078	INTJBFR DS	0F	JRNL BUFFER WAIT
000078	INTJBFRT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
00007C	INTJBFRRH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000080	INTJBFRR# DS	F	....# WAITS
	*		
000084	INTLOGR DS	0F	DCLOG READ WAIT
000084	INTLOGRT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000088	INTLOGRH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
00008C	INTLOGR# DS	F	....# WAITS
	*		
000090	INTLOGW DS	0F	DCLOG WRITE WAIT
000090	INTLOGWT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000094	INTLOGWH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000098	INTLOGW# DS	F	....# WAITS
	*		
00009C	INTLOGS DS	0F	DCLOG SINGLE THREAD WAIT
00009C	INTLOGST DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000A0	INTLOGSH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000A4	INTLOGS# DS	F	....# WAITS
	*		
0000A8	INTLOGF DS	0F	DCLOG FULL WAIT
0000A8	INTLOGFT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000AC	INTLOGFH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000B0	INTLOGF# DS	F	....# WAITS
	*		
0000B4	INTSCRRT DS	0F	SCRATCH READ WAIT
0000B4	INTSCRRT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000B8	INTSCRRRH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000BC	INTSCRRT# DS	F	....# WAITS
	*		
0000C0	INTSCRW DS	0F	SCRATCH WRITE WAIT
0000C0	INTSCRWT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000C4	INTSCRWH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000C8	INTSCRW# DS	F	....# WAITS
	*		
0000CC	INTSCRSH DS	0F	SCRATCH SINGLE THREAD WAIT
0000CC	INTSCRST DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000D0	INTSCRSH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000D4	INTSCRSH# DS	F	....# WAITS
	*		
0000D8	INTQUER DS	0F	QUEUE READ WAIT
0000D8	INTQUERT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)

C.3 Performance Monitor record descriptions

```

0000DC          INTQUERH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
0000E0          INTQUER# DS    F          ....# WAITS
*
0000E4          INTQUEW  DS    0F          QUEUE WRITE WAIT
0000E4          INTQUEWT DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
0000E8          INTQUEWH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
0000EC          INTQUEW# DS    F          ....# WAITS
*
*-----*
*
0000F0          DS    0F
000F0          INT1DSL N EQU  *-#PMINT          PART1 - LENGTH OF RECORD
*
*
00010          INT1#BKT EQU  16          PART1 - # WAIT BUCKETS
000D4          INT1DTL N EQU  INT1DSL N-INTHDRLN PART1 - LENGTH OF RECORD DATA
*
*-----*
*
0000F0          000F0 0001C          ORG  INTDATA
*
*-----*
*
*          PART2 - INTSEQ#=2
*
*-----*
*
00001C          INT2BKTS DS    0F          PART2 - START OF WAIT TIME BUCKETS
*
00001C          INTDBKY  DS    0F          DBKEY WAIT
00001C          INTDBKYT DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
000020          INTDBKYH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
000024          INTDBKY# DS    F          ....# WAITS
*
000028          INTSTGP  DS    0F          STORAGE POOL WAIT
000028          INTSTGPT DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
00002C          INTSTGPH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
000030          INTSTGP# DS    F          ....# WAITS
*
000034          INTPGMP  DS    0F          PGMPOOL WAIT
000034          INTPGMPT DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
000038          INTPGMPH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
00003C          INTPGMP# DS    F          ....# WAITS
*
000040          INTPGML  DS    0F          PGM LOAD WAIT
000040          INTPGMLT DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
000044          INTPGMLH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
000048          INTPGML# DS    F          ....# WAITS
*
00004C          INTLDRS  DS    0F          LOADER SINGLE THREAD WAIT
00004C          INTLDRST DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
000050          INTLDRSH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
000054          INTLDRS# DS    F          ....# WAITS
*
000058          INTACCS  DS    0F          AREA ACCESS WAIT
000058          INTACCST DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
00005C          INTACCSH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
000060          INTACCS# DS    F          ....# WAITS
*
000064          INTERUS  DS    0F          ERUS WAIT
000064          INTERUST DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
000068          INTERUSH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
00006C          INTERUS# DS    F          ....# WAITS
*
000070          INTDDSW  DS    0F          DDS WAIT
000070          INTDDSW# DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)

```

C.3 Performance Monitor record descriptions

```

000074          INTDDSWH DS    F          ....HIGHEST WAIT TIME (10**-4 SEC)
000078          INTDDSW# DS   F          ....# WAITS
*
00007C          INTCKUS  DS   0F         AVAILABLE CHKUSER WAIT
00007C          INTCKUST DS   F          ....SUM OF WAIT TIMES (10**-4 SEC)
000080          INTCKUSH DS   F          ....HIGHEST WAIT TIME (10**-4 SEC)
000084          INTCKUS# DS   F          ....# WAITS
*
000088          INTTPIR  DS   0F         TPIO READ WAIT
000088          INTTPIRT DS   F          ....SUM OF WAIT TIMES (10**-4 SEC)
00008C          INTTPIRH DS   F          ....HIGHEST WAIT TIME (10**-4 SEC)
000090          INTTPIR# DS   F          ....# WAITS
*
000094          INTTPIW  DS   0F         TPIO WRITE WAIT
000094          INTTPIWT DS   F          ....SUM OF WAIT TIMES (10**-4 SEC)
000098          INTTPIWH DS   F          ....HIGHEST WAIT TIME (10**-4 SEC)
00009C          INTTPIW# DS   F          ....# WAITS
*
0000A0          INTTCA   DS   0F         TCA NEW TASK WAIT
0000A0          INTTCAT  DS   F          ....SUM OF WAIT TIMES (10**-4 SEC)
0000A4          INTTCAH  DS   F          ....HIGHEST WAIT TIME (10**-4 SEC)
0000A8          INTTCA#  DS   F          ....# WAITS
*
0000AC          INTDBG   DS   0F         DBGROUP WAIT
0000AC          INTDBGT  DS   F          ....SUM OF WAIT TIMES (10**-4 SEC)
0000B0          INTDBGH  DS   F          ....HIGHEST WAIT TIME (10**-4 SEC)
0000B4          INTDBG#  DS   F          ....# WAITS
*
0000B8          INTSHC   DS   0F         SHARED CACHE WAIT
0000B8          INTSHCT  DS   F          ....SUM OF WAIT TIMES (10**-4 SEC)
0000BC          INTSHCH  DS   F          ....HIGHEST WAIT TIME (10**-4 SEC)
0000C0          INTSHC#  DS   F          ....# WAITS
*
0000C4          INTOTHE  DS   0F         OTHER EXTERNAL WAIT
0000C4          INTOTHET DS   F          ....SUM OF WAIT TIMES (10**-4 SEC)
0000C8          INTOTHEH DS   F          ....HIGHEST WAIT TIME (10**-4 SEC)
0000CC          INTOTHE# DS   F          ....# WAITS
*
0000D0          INTOTHR  DS   0F         OTHER WAITS
0000D0          INTOTHRT DS   F          ....SUM OF WAIT TIMES (10**-4 SEC)
0000D4          INTOTHRH DS   F          ....HIGHEST WAIT TIME (10**-4 SEC)
0000D8          INTOTHR# DS   F          ....# WAITS
*
0000DC          INTXLK   DS   0F         DSG XESLOCK WAIT
0000DC          INTXLKT  DS   F          ....SUM OF WAIT TIMES (10**-4 SEC)
0000E0          INTXLKH  DS   F          ....HIGHEST WAIT TIME (10**-4 SEC)
0000E4          INTXLK#  DS   F          ....# WAITS
*
0000E8          INTXLI   DS   0F         DSG XESLIST WAIT
0000E8          INTXLIT  DS   F          ....SUM OF WAIT TIMES (10**-4 SEC)
0000EC          INTXLIH  DS   F          ....HIGHEST WAIT TIME (10**-4 SEC)
0000F0          INTXLI#  DS   F          ....# WAITS
*
*-----*
*
0000F4          DS    0F
000F4          INT2DSLN EQU  **-#PMINT          PART2 - LENGTH OF RECORD
*
*
00012          INT2#BKT EQU  18          PART2 - # WAIT BUCKETS
000D8          INT2DTLN EQU  INT2DSLN-INTHDRLN PART2 - LENGTH OF RECORD DATA
*
*-----*
*
0000F4          000F4 000F4          ORG  ,
*

```

C.3 Performance Monitor record descriptions

```
000F4      INTMXLEN EQU  ((* - #PMINT + 3) / 4 * 4)  LENGTH OF LARGEST PART
*
00022      INT#BKTS EQU  INT1#BKT + INT2#BKT      # WAIT BUCKETS ENTIRE RECORD
*
*-----
```

C.3.9 #PMJRLDS (PMIM journal wait)

```

          COPY #PMJRLDS
          *****
          ***                                     ***
          ***   #PMJRL - PMIM JOURNAL WAIT RECORD   ***
          ***                                     ***
          *****
          *
          *   ONE FOR EACH DISK JOURNAL IN DMCL
          *
          *-----*
          *
Offset          Value
000000          #PMJRL   DSECT          03:24:47 03/03/88 12/27/94
          *
          *-----*
          *
000000          JRLHDR   DS   0H          RECORD HEADER
          *
000000          JRLLEN   DS   H          RECORD LENGTH      (INCLUSIVE)
000002          JRLRTYPE DS   X          RECORD TYPE
          000006          JRL$TYPE EQU   6          ..PMIM JOURNAL WAIT RECORD
000003          JRLSEQ#  DS   X          SEQUENCE NUMBER    (ALWAYS 1)
000004          JRLVER#  DS   X          RECORD VERSION
          000001          JRL$VER EQU   1          ..CURRENT VERSION
000005          DS   XL3          ** RESERVED **
          *
          DS   F          ** RESERVED **
000008          JRLSDATE DS   PL4        INTERVAL START DATE  (00YYYYDDF)
00000C          JRLSTIME DS   F          INTERVAL START TIME  (10**-4 SEC)
000010          JRLEDATE DS   PL4        INTERVAL END DATE    (00YYYYDDF)
000014          JRLETIME DS   F          INTERVAL END TIME    (10**-4 SEC)
000018          *
          0001C          JRLHDLN EQU  *-JRLHDR        HEADER LENGTH
          *
          *-----*
          *
          0001C          JRLDATA EQU  *          START OF JOURNAL DATA
          *
00001C          JRLNAME  DS   CL27        NAME OF JOURNAL
000037          JRLFILE  DS   CL8         DD NAME OF JOURNAL
00003F          DS   X          ** RESERVED **          PERF/109
000040          JRLBRBN  DS   F          FIRST RBN WRITTEN IN INTVL
000044          JRLERBN  DS   F          LAST RBN WRITTEN IN INTVL
000048          JRL#BLKW DS   F          # BLOCKS WRITTEN DURING INTVL
00004C          JRL#BYTW DS   F          # BYTES WRITTEN DURING INTVL
000050          JRLPGSZ  DS   F          PAGE SIZE OF JRNL
000054          DS   F          ** RESERVED **
          *
          *-----*
          *
          000058          JRLWBKTS DS  0F          START OF WAIT TIME STATISTICS
          *
          000058          JRLJRLR DS  0F          JRNL READ WAIT
000058          JRLJRLRT DS   F          ...SUM OF WAIT TIMES (10**-4 SEC)
00005C          JRLJRLRH DS   F          ...HIGHEST WAIT TIME (10**-4 SEC)
000060          JRLJRLR# DS   F          ...# WAITS
          *
          000064          JRLJRLW DS  0F          JRNL WRITE WAIT
000064          JRLJRLWT DS   F          ...SUM OF WAIT TIMES (10**-4 SEC)
000068          JRLJRLWH DS   F          ...HIGHEST WAIT TIME (10**-4 SEC)
00006C          JRLJRLW# DS   F          ...# WAITS
    
```

C.3 Performance Monitor record descriptions

```

*
000070 JRLJBFR DS 0F JRNL BUFFER WAIT
000070 JRLJBFR DS F ....SUM OF WAIT TIMES (10**-4 SEC)
000074 JRLJBFRH DS F ....HIGHEST WAIT TIME (10**-4 SEC)
000078 JRLJBFR# DS F ....# WAITS
*
00007C JRLJBEE DS 0F JBEE WAIT
00007C JRLJBEET DS F ....SUM OF WAIT TIMES (10**-4 SEC)
000080 JRLJBEEH DS F ....HIGHEST WAIT TIME (10**-4 SEC)
000084 JRLJBEE# DS F ....# WAITS
*
* DS F
*
000088 JRLJBC DS 0F JBC WAIT
000088 JRLJBCT DS F ....SUM OF WAIT TIMES (10**-4 SEC)
00008C JRLJBCH DS F ....HIGHEST WAIT TIME (10**-4 SEC)
000090 JRLJBC# DS F ....# WAITS
*
* DS 0F ** RESERVED **
000094 DS F ....SUM OF WAIT TIMES (10**-4 SEC)
000098 DS F ....HIGHEST WAIT TIME (10**-4 SEC)
00009C DS F ....# WAITS
*
*-----
*
000A0 JRLDSLEN EQU ((*-#PMJRL+3)/4)*4 LENGTH OF LOG RECORD
*
*-----
*
00005 JRL#BKTS EQU 5 # WAIT BUCKETS
00084 JRLDTLEN EQU JRLDSLEN-JRLHDLN LENGTH OF RECORD DATA
*
*-----

```

C.3.10 #PMLNEDS (PMIM line wait)

Offset	Value
	<pre> COPY #PMLNEDS ***** *** *** *** #PMLNE - PMIM LINE WAIT RECORD *** *** *** ***** * * ONE LINE WAIT RECORD FOR EACH LINE IN SYSGEN * *-----* * #PMLNE DSECT 03:24:57 03/03/88 07/11/91 * *-----* * 000000 LNEHDR DS 0H RECORD HEADER * 000000 LNELEN DS H RECORD LENGTH (INCLUSIVE) 000002 LNERTYPE DS X RECORD TYPE 000003 LNE\$TYPE EQU 7 ..PMIM LINE WAIT RECORD 000004 LNESEQ# DS X SEQUENCE NUMBER (ALWAYS 1) 000004 LNEVER# DS X RECORD VERSION 000005 LNE\$VER EQU 1 ..CURRENT VERSION 000005 DS XL3 ** RESERVED ** * 000008 DS F ** RESERVED ** 00000C LNESDATE DS PL4 INTERVAL START DATE (00YYDDDF) 000010 LNESTIME DS F INTERVAL START TIME (10**-4 SEC) 000014 LNEEDATE DS PL4 INTERVAL END DATE (00YYDDDF) 000018 LNEETIME DS F INTERVAL END TIME (10**-4 SEC) * 0001C LNEHDRLN EQU *-LNEHDR HEADER LENGTH * *-----* * 0001C LNE\$DATA EQU * START OF LINE DATA * 00001C LNE\$NAME DS CL8 NAME OF LINE 000024 LNE\$DRVR DS CL8 NAME OF LINE DRIVER * 00002C LNE\$TYPE DS 0CL2 00002C LNETYPE DS C LINE TYPE (PLETYPE) 00002D LNE\$METH DS C ACCESS METHOD (PLEMETH) 00002E LNE\$TERM DS H # TERMINALS ON THE LINE (PLENTERM) * 000030 LNE\$STATS DS X STATUS AT INTVL START (PLEFLAGS) 000031 LNE\$STATE DS X STATUS AT INTVL END (PLEFLAGS) 000032 DS H ** RESERVED ** * 000034 LNE\$#READ DS F # READS 000038 LNE\$#WRIT DS F # WRITES 00003C LNE\$#RDER DS F # READ ERRORS 000040 LNE\$#WRER DS F # WRITE ERRORS * 000044 LNE\$BLEN DS F # CHARS BEFORE COMPACT (PLEBLEN) 000048 LNE\$CLEN DS F # CHARS AFTER COMPACT (PLECLEN) * 00004C LNE\$#RPLS DS H # RPLS SYSGENNED (PLE5NRPL) 00004E DS H ** RESERVED ** </pre>

C.3 Performance Monitor record descriptions

```

*
000050 LNE#RPLQ DS F # RPL REQUESTS (PLE5QRPL)
000054 LNE#RPLW DS F # RPL WAITS (PLE5WRPL)
* IF HAVE AN RPL WAIT BUCKET, NEED ABOVE?
* (ABOVE IS FROM PLE. WAIT BUCKET IS FROM CECB.
* SO MAY DIFFER THO WHY I CAN'T SAY.)
*
000058 LNE#BYTR DS F # BYTES READ
00005C LNE#BYTW DS F # BYTES WRITTEN
* CAN WE DO THESE?
000060 DS F ** RESERVED **
*
*-----*
*
000064 LNEWBKTS DS 0F START OF WAIT TIME STATISTICS
*
000064 LNETPIR DS 0F TERMINAL READ WAIT
000064 LNETPIRT DS F ....SUM OF WAIT TIMES (10**-4 SEC)
000068 LNETPIRH DS F ....HIGHEST WAIT TIME (10**-4 SEC)
00006C LNETPIR# DS F ....# WAITS
*
000070 LNETPIW DS 0F TERMINAL WRITE WAIT
000070 LNETPIWT DS F ....SUM OF WAIT TIMES (10**-4 SEC)
000074 LNETPIWH DS F ....HIGHEST WAIT TIME (10**-4 SEC)
000078 LNETPIW# DS F ....# WAITS
*
00007C LNERPL DS 0F RPL WAIT
00007C LNERPLT DS F ....SUM OF WAIT TIMES (10**-4 SEC)
000080 LNERPLH DS F ....HIGHEST WAIT TIME (10**-4 SEC)
000084 LNERPL# DS F ....# WAITS
*
000088 DS 0F ** RESERVED **
000088 DS F ....SUM OF WAIT TIMES (10**-4 SEC)
00008C DS F ....HIGHEST WAIT TIME (10**-4 SEC)
000090 DS F ....# WAITS
*
*-----*
*
00094 LNESLEN EQU ((*-#PMLNE+3)/4)*4 LENGTH OF LOG RECORD
*
*-----*
*
00003 LNE#BKTS EQU 3 # WAIT BUCKETS
00078 LNETLEN EQU LNESLEN-LNEHDLN LENGTH OF RECORD DATA
*
*-----*

```

C.3.11 #PMPGMDS (PMIM program pool)

Offset	Value	
		<pre> COPY #PMPGMDS ***** *** *** *** #PMPGM - INTERVAL MONITOR PROGRAM POOL WAIT DATA *** *** *** ***** * * ONE FOR EACH PROGRAM POOL IN SYSGEN * *-----* * </pre>
000000		<pre> #PMPGM DSECT 04/20/88 22:40:03 * *-----* * </pre>
000000		<pre> PGMHDR DS 0H RECORD HEADER * </pre>
000000		<pre> PGMLEN DS H RECORD LENGTH (INCLUSIVE) </pre>
000002		<pre> PGMRTYPE DS X RECORD TYPE </pre>
000003	00008	<pre> PGM\$TYPE EQU 8 ..PMIM PROGRAM POOL WAIT RECORD </pre>
000004		<pre> PGMSEQ# DS X SEQUENCE NUMBER (ALWAYS 1) </pre>
000004		<pre> PGMVER# DS X RECORD VERSION </pre>
000005	00001	<pre> PGM\$VER EQU 1 ..CURRENT VERSION </pre>
000005		<pre> DS XL3 ** RESERVED ** * </pre>
000008		<pre> DS F ** RESERVED ** </pre>
00000C		<pre> PGMSDATE DS PL4 INTERVAL START DATE (00YYYYDDF) </pre>
000010		<pre> PGMSTIME DS F INTERVAL START TIME (10**-4 SEC) </pre>
000014		<pre> PGMEDATE DS PL4 INTERVAL END DATE (00YYYYDDF) </pre>
000018		<pre> PGMETIME DS F INTERVAL END TIME (10**-4 SEC) * </pre>
	0001C	<pre> PGMHDRLN EQU *-PGMHDR HEADER LENGTH * *-----* * </pre>
	0001C	<pre> PGMDATA EQU * START OF PROGRAM POOL DATA * </pre>
00001C		<pre> PGMPTYPE DS X POOL TYPE (PDTPTYP) </pre>
000080	00080	<pre> PGMPP24 EQU X'80' 24 BIT PROGRAM POOL </pre>
000040	00040	<pre> PGMRP24 EQU X'40' 24 BIT REENTRANT POOL </pre>
000020	00020	<pre> PGMPP31 EQU X'20' 31 BIT PROGRAM POOL </pre>
000010	00010	<pre> PGMRP31 EQU X'10' 31 BIT REENTRANT POOL * </pre>
00001D		<pre> DS X ** RESERVED ** </pre>
00001E		<pre> PGMPGSZ DS H PGMPOOL PAGE SIZE (PDTNPGSZ) </pre>
000020		<pre> PGM#PGS DS F # PAGES IN POOL (PDTNPAGE) * </pre>
000024		<pre> PGMINUSE DS F # PGS IN USE AT INTVL END (PDTNPAGO) </pre>
000028		<pre> PGMHIWAT DS F # PGS IN USE HI WATERMARK (PDTNHW) </pre>
00002C		<pre> PGM#PGLD DS F # PAGES LOADED * </pre>
000030		<pre> PGM#OVNU DS F # LDS INTO SPACE NOT USED (PDTNPRGA) </pre>
000034		<pre> PGM#OVPU DS F # OVLYS OF PGM NOT IN USE (PDTNPRGN) </pre>
000038		<pre> PGM#OVIU DS F # OVLYS OF PGM IN USE (PDTNPRGU) </pre>
00003C		<pre> PGM#LOADS DS F # LOADS TO POOL </pre>
000040		<pre> DS F ** RESERVED ** * *-----* * </pre>
000044		<pre> PGMWBKTS DS 0F START OF WAIT TIME STATISTICS </pre>

C.3 Performance Monitor record descriptions

```

*
000044      PGMPGML DS 0F          LOAD WAIT
000044      PGMPGMLT DS F          ....SUM OF WAIT TIMES (10**-4 SEC)
000048      PGMPGMLH DS F          ....HIGHEST WAIT TIME (10**-4 SEC)
00004C      PGMPGML# DS F          ....# WAITS
*
000050      PGMPGMP DS 0F          POOL SPACE WAIT
000050      PGMPGMPT DS F          ....SUM OF WAIT TIMES (10**-4 SEC)
000054      PGMPGMPH DS F          ....HIGHEST WAIT TIME (10**-4 SEC)
000058      PGMPGMP# DS F          ....# WAITS
*
00005C      DS 0F          ** RESERVED **
00005C      DS F          ....SUM OF WAIT TIMES (10**-4 SEC)
000060      DS F          ....HIGHEST WAIT TIME (10**-4 SEC)
000064      DS F          ....# WAITS
*
*-----
*
00068      PGMSLEN EQU ((*-#PMPGM+3)/4)*4  LENGTH OF LOG RECORD
*
*-----
*
00002      PGM#BKTS EQU 2          # WAIT BUCKETS
0004C      PGMDTLEN EQU PGMSLEN-PGMHDLN  LENGTH OF RECORD DATA
*
*-----

```

C.3.12 #PMRUSDS (PMIM run units information)

Offset	Value
	<pre> COPY #PMRUSDS ***** *** *** *** #PMRUS - INTERVAL RUNUNITS INFORMATION RECORD *** *** *** ***** * * ONE PER INTERVAL * *-----* * </pre>
000000	<pre> #PMRUS DSECT 04/18/88 21:56:18 * *-----* * </pre>
000000	<pre> RUSHDR DS 0H RECORD HEADER * </pre>
000000	<pre> RUSLEN DS H RECORD LENGTH (INCLUSIVE) </pre>
000002	<pre> RUSRTYPE DS X RECORD TYPE </pre>
000003	<pre> RUS\$TYPE EQU 9 ..PMIM RUNUNIT WAIT RECORD </pre>
000004	<pre> RUSSEQ# DS X SEQUENCE NUMBER (ALWAYS 1) RUSVER# DS X RECORD VERSION </pre>
000005	<pre> RUS\$VER EQU 1 ..CURRENT VERSION DS XL3 ** RESERVED ** * </pre>
000008	<pre> DS F ** RESERVED ** </pre>
00000C	<pre> RUSSDATE DS PL4 INTERVAL START DATE (00YYDDF) </pre>
000010	<pre> RUSSTIME DS F INTERVAL START TIME (10**-4 SEC) </pre>
000014	<pre> RUSEDATE DS PL4 INTERVAL END DATE (00YYDDF) </pre>
000018	<pre> RUSETIME DS F INTERVAL END TIME (10**-4 SEC) * </pre>
0001C	<pre> RUSHDRLN EQU *-RUSHDR HEADER LENGTH * *-----* * </pre>
0001C	<pre> RUSDATA EQU * START OF RUNUNIT DATA * </pre>
00001C	<pre> RUS#RU DS F # RUNUNITS STARTED DURING INTVL </pre>
000020	<pre> RUS#EXRU DS F # EXT. RUS STARTED DURING INTVL </pre>
000024	<pre> RUS#RUNM DS F # RUNUNITS ENDED NORMAL IN INTVL </pre>
000028	<pre> RUS#EXNM DS F # EXT. RUS ENDED NORMAL IN INTVL </pre>
00002C	<pre> RUS#MXRU DS F # MAX CONCURRENT RUNUNITS </pre>
000030	<pre> RUS#MXEX DS F # MAX CONCURRENT EXT. RUS </pre>
000034	<pre> RUS#DBKL DS F # DBKEY LOCKS </pre>
000038	<pre> RUS#EXDB DS F # EXTERNAL RUS WITH DB RUS </pre>
00003C	<pre> RUS#RACS DS F # RUNUNITS ACTIVE AT INTVL START </pre>
000040	<pre> RUS#XACS DS F # EXT. RUS ACTIVE AT INTVL START </pre>
000044	<pre> RUS#RACE DS F # RUNUNITS ACTIVE AT INTVL END </pre>
000048	<pre> RUS#XACE DS F # EXT. RUS ACTIVE AT INTVL END </pre>
00004C	<pre> RUS#SLOK DS F # SYSTEM LOCKS </pre>
000050	<pre> RUSNXTRU DS F # NEXT RUNUNIT ID TO ASSIGN </pre>
000054	<pre> DS F ** RESERVED ** * *-----* * </pre>
	<pre> * DB STATISTICS FOR INTERVAL * </pre>
000058	<pre> RUSPAGRD DS F # DB PAGES READ (STBPAGRD) </pre>
00005C	<pre> RUSPAGWR DS F # DB PAGES WRITTEN (STBPAGWR) </pre>
000060	<pre> RUSPAGRQ DS F # DB PAGES REQUESTED (STBPAGRQ) </pre>

C.3 Performance Monitor record descriptions

```

000064          RUSCALNO DS    F          # DB CALC RECS NO OFLOW (STBCALNO)
000068          RUSCALOV DS    F          # DB CALC RECS W/ OFLOW (STBCALOV)
00006C          RUSVIANO DS    F          # DB VIA RECS NO OFLOW (STBVIANO)
000070          RUSVIAOV DS    F          # DB VIA RECS W/ OFLOW (STBVIAOV)
000074          RUSRECRQ DS    F          # DB RECORDS REQUESTED (STBRECRQ)
000078          RUSRECCU DS    F          # DB RECORDS CURR OF RU (STBRECCU)
00007C          RUSDBRQS DS    F          # DB DBMS CALLS        (STBDBRQS)
000080          RUSFRAGS DS    F          # DB FRAGMENTS STORED (STBFRAGS)
000084          RUSUPCNT DS    F          # DB RECORDS UPDATED  (STBUPCNT)
000088          RUSCACHE DS    F          # DB RECS FND IN CACHE (STBCACHE)
00008C          RUSPRFET DS    F          # DB RECS FND IN PREFET (STBPRFET)
*
*-----
*
* JRNL BLOCK % FULL STATISTICS FOR INTERVAL
*
000090          RUSPERC DS    10H          JRNL BLK % FULL BUCKETS (JBCPERC)
*
*-----
*
* SQL STATISTICS FOR INTERVAL
*
0000A4          RUS#CMD DS    F          # OF SQL COMMANDS EXECUTED
0000A8          RUS#FET DS    F          # OF ROWS FETCHED
0000AC          RUS#INS DS    F          # OF ROWS INSERTED
0000B0          RUS#UPD DS    F          # OF ROWS UPDATED
0000B4          RUS#DEL DS    F          # OF ROWS DELETED
0000B8          RUS#SRT DS    F          # OF SORTS PERFORMED
0000BC          RUS#SRR DS    F          # OF ROWS SORTED
0000C0          RUS#SMI DS    F          # OF MINIMUM ROWS
0000C4          RUS#SMX DS    F          # OF MAXIMUM ROWS
0000C8          RUS#AMC DS    F          # OF AM RECOMPILES
*
0000CC          DS    3F          ** RESERVED **
*
*-----
*
0000D8          RUSDSLEN EQU    ((*-#PMRUS+3)/4)*4  LENGTH OF LOG RECORD
*
*-----
*
0000BC          RUSDTLEN EQU    RUSDSLEN-RUSHDRLN  LENGTH OF RECORD DATA
*
*-----

```

C.3.13 #PMSMHDS (SMF header)

```

                                COPY #PMSMHDS
*****
***                               ***
*** #PMSMH - PERFORMANCE MONITOR SMF HEADER ***
***                               ***
*****
*
* DESCRIBES THE HEADER IN THE FRONT OF THE SMF RECORDS WRITTEN
* BY THE PERFORMANCE MONITOR
*
* THE FIRST PORTION OF THE PERFORMANCE MONITOR SMF HEADER IS
* THE STANDARD IBM SMF HEADER
*
*-----
*
000000          00000 0001C      #PMSMH  DSECT
*
*-----
*
000000          SMFHLEN DS   H           RECORD LENGTH
000002          SMFHSEG DS   H           SEGMENT DESCRIPTOR      (NOT USED)
*
000004          SMFHFLG DS   X           SYSTEM INDICATOR
                                MVS
000002          SMFHMVS EQU  X'02'      MVS
000006          SMFHXA EQU  X'06'      MVS/XA
*
000005          SMFHRTY DS   X           SMF RECORD TYPE
000006          SMFHIME DS  XL4          TIME WRITTEN            (10**-2 SECS)
00000A          SMFHDTE DS  PL4          DATE WRITTEN            (00YYDDDF)
00000E          SMFHSID DS  CL4          SYSTEM IDENTIFICATION
*
*          END OF STANDARD IBM SMF HEADER
*
*-----
*
000012          SMFH#REC DS   H           # OF PERFMON RECORDS IN THIS
                                SMF RECORD
*
000014          SMFHPMID DS   X           COMPONENT ID
000001          SMFHPMIM EQU  X'01'      INTERVAL MONITOR
000002          SMFHPPAM EQU  X'02'      APPLICATION MONITOR
000015          SMFHCV# DS   X           CENTRAL VERSION #      (0-255)
000016          SMFHDCV# DS   H           DC SYSTEM VERSION #   (1-9999)
*
000018          SMFHVER DS  CL4          PERFORMANCE MONITOR VERSION
0000F0          SMFH$VER EQU  C'1500'    RELEASE 15.0
*
00001C          SMFHDATA EQU  *           LOCATION OF FIRST PERFMON RECORD
*
*-----
*
00001C          SMHDSLEN EQU  *-#PMSMH    LENGTH
*
*-----

```

C.3.14 #PMSM4DS (SMF type 4 record)

```

COPY #PMSM4DS
*****
***                                     ***
***      #PMSM4 - APPLICATION MONITOR SMF TYPE 4 RECORDS      ***
***                                     ***
*****
*
*      SMF TYPE 4 RECORDS - JOB STEP COMPLETION.
*
*      THE PERFORMANCE MONITOR WILL WRITE ONE SMF TYPE 4 RECORD
*      FOR EACH TASK AT TASK TERMINATION IF DESIRED
*
*      FIELD NAMES USED ARE THE SAME AS THOSE SHOWN IN
*      THE IBM SPL:SMF MANUAL
*
*-----
*

```

Offset	Value	Field Name	DS	Length	Description
000000		#PMSM4	DSECT		05/17/88 18:49:15
000000		SMF4LEN	DS	H	RECORD LENGTH
000002		SMF4SEG	DS	H	SEGMENT DESCRIPTOR - UNUSED
000004		SMF4FLG	DS	X	SYSTEM INDICATOR
	00002	SMF4MVS	EQU	X'02'	..MVS
	00006	SMF4XA	EQU	X'06'	..MVS/XA
000005		SMF4RTY	DS	X	SMF RECORD TYPE
	00004	SMF4\$RTY	EQU	X'04'	..STEP TERMINATION RECORD TYPE
000006		SMF4TME	DS	XL4	TIME RECORD WRITTEN (10**-2 SEC)
00000A		SMF4DTE	DS	PL4	DATE RECORD WRITTEN (00YYDDDF)
00000E		SMF4SID	DS	CL4	SYSTEM IDENTIFIER FROM CVT
000012		SMF4JBN	DS	CL8	JOBNAME OF CV JOB
00001A		SMF4RST	DS	XL4	DC TASK INIT TIME (10**-2 SEC)
00001E		SMF4RSD	DS	PL4	DC TASK INIT DATE (00YYDDDF)
000022		SMF4UIF	DS	CL8	USER IDENTIFICATION
					..DC/UCF = USERID (FIRST 8 BYTES)
					..CICS = OPERATOR ID
					..BATCH = BATCH JOBNAME
00002A 01		SMF4STN	DC	X'01'	STEP NUMBER - ALWAYS 01
00002B		SMF4SIT	DS	XL4	SAME AS SMF4RST-SEE ABOVE
00002F		SMF4STID	DS	PL4	SAME AS SMF4RSD-SEE ABOVE
000033		SMF4NCI	DS	XL4	UNUSED
000037		SMF4SCC	DS	XL2	COMPLETION INDICATOR
					..NORMAL COMPLETION = X'0000'
					..ABEND COMPLETION = X'FFFF'
000039		SMF4PRTY	DS	XL1	IDMS-DC/UCF TASK PRIORITY
00003A		SMF4PGMN	DS	CL8	PROGRAM NAME IDENTIFIER
					..DC/UCF = PROGRAM NAME
					..ADSO = DIALOG NAME

C.3 Performance Monitor record descriptions

		*		..ERUS = PROGRAM NAME FROM
		*		BIND RUNUNIT
		*		
000042		SMF4STMN DS	CL8	STEP NAME (TASK CODE IDENTIFIER)
		*		..DC/UCF = TASK CODE
		*		..ADSO = APPLICATION NAME
		*		..BATCH = BATCH JOBNAME
		*		..CICS = TRANSACTION ID
		*		
00004A		SMF4RSV5 DS	XL2	UNUSED
00004C		SMF4SYST DS	XL2	IDMS PGMPOOL HI WATERMARK IN KBYTES
00004E		SMF4HOST DS	XL2	IDMS STGPOOL HI WATERMARK IN KBYTES
000050		SMF4RV1 DS	XL2	UNUSED
000052		SMF4RSHO DS	XL4	UNUSED
000056		SMF4SPK DS	XL1	STORAGE PROTECT KEY OF CV
000057		SMF4STI DS	XL1	STEP TERMINATION INDICATOR
	00000	SMF4\$NRM EQU	X'00'	..NORMAL COMPLETION
	00002	SMF4\$ABD EQU	X'02'	..ABEND
000058		SMF4RV2 DS	XL2	UNUSED
00005A		SMF4AST DS	XL4	SAME AS SMF4RST
00005E		SMF4PPST DS	XL4	SAME AS SMF4RST
000062		SMF4RV3 DS	XL1	UNUSED
000063		SMF4SRBT DS	XL3	UNUSED
000066		SMF4RIN DS	XL2	UNUSED
000068		SMF4RLCT DS	XL2	OFFSET TO RELOCATE SECTION
		*		
00006A 000A		SMF4LENN DC	XL2'000A'	LENGTH OF DEVICE ENTRY PORTION
00006C 20		SMF4DEVC DC	XL1'20'	DEVICE CLASS = DASD
00006D 0E		SMF4UTYP DC	XL1'0E'	DEVICE TYPE = 3380
00006E 0FFF		SMF4CUAD DC	XL2'0FFF'	DEVICE ADDRESS
000070		SMF4EXCP DS	XL4	# OF IDMS PAGES READ AND WRITTEN
		*		
000074		SMF4LNTH DS	XL1	LENGTH OF ACCOUNTING SECTION
		*		..DC/UCF = X'28'
		*		..CICS ERUS = X'24'
		*		..BATCH ERUS = LENGTH OF FIELDS
		*		X'22' MAX
		*		
000075		SMF4SETM DS	XL3	TASK TOTAL CPU TIME (10**-2 SEC)
		*		
000078		SMF4NAF DS	XL1	# OF ACCOUNTING FIELDS
		*		..DC/UCF = X'04'
		*		..CICS ERUS = X'04'
		*		..BATCH ERUS = # OF FIELDS CAPTURED
		*		BY SVC EXIT
000079		SMF4ACTF DS	CL36	ACCOUNTING FIELDS
		*		
00009D	00079	ORG	SMF4ACTF	
000079		SM4DACTF DS	0X	DC/UCF ACCOUNTING FIELDS
000079 08		SM4DTSKL DC	XL1'08'	..TASK CODE LENGTH
00007A		SM4DTSK DS	CL8	..TASK CODE
000082 08		SM4DLTEL DC	XL1'08'	..LTERM LENGTH
000083		SM4DLTE DS	CL8	..LTERM
00008B 0C		SM4DBLGL DC	XL1'0C'	..BILLING GROUP LENGTH
00008C		SM4DBLG DS	CL12	..BILLING GROUP
000098 04		SM4DTIDL DC	XL1'04'	..DC TASK ID LENGTH
000099		SM4DTID DS	XL4	..DC TASK ID (TASK NUMBER)
	00024	SM4DACTL EQU	*-SM4DACTF	DC/UCF ACCOUNTING FIELDS LENGTH
		*		
00009D	00079	ORG	SMF4ACTF	
000079		SM4ACTF DS	0X	CICS ERUS ACCOUNTING FIELDS
000079 08		SM4CTRNL DC	XL1'08'	..TRANSACTION ID LENGTH
00007A		SM4CTRN DS	CL8	..TRANSACTION ID
000082 08		SM4CTRML DC	XL1'08'	..TERMINAL ID LENGTH
000083		SM4CTRM DS	CL8	..TERMINAL ID
00008B 08		SM4COPRL DC	XL1'08'	..OPERATOR ID LENGTH

C.3 Performance Monitor record descriptions

00008C		SM4COPR	DS	CL8	..OPERATOR ID
000094 04		SM4CTIDL	DC	XL1'04'	..CICS TASK ID LENGTH
000095		SM4CTID	DS	XL4	..CICS TASK ID (TASK NUMBER)
	00020	SM4CACTL	EQU	*-SM4CACTF	CICS ERUS ACCOUNTING FIELDS LENGTH
		*			
000099	00079		ORG	SMF4ACTF	
000079		SM4BACTF	DS	CL30	BATCH ERUS = JOBCARD ACCOUNTING INFO
		*			(30 BYTES MAX)
000097	0009D		ORG	,	
00009D		SMF4PGIN	DS	CL102	RELOCATE SECTION - UNUSED
		*			
		*-----			
		*			
	00103	SM4DSLEN	EQU	*-#PMSM4	LENGTH OF SMF4 RECORD
		*			
		*-----			

C.3.15 #PMS30 (SMF type 30 record)

```

COPY #PMS30DS
*****
***                                     ***
***   #PMS30 - APPLICATION MONITOR SMF TYPE 30 RECORDS   ***
***                                     ***
*****
*
*   SMF TYPE 30 RECORDS - COMMON ADDRESS SPACE WORK RECORD
*
*   THE PERFORMANCE MONITOR WILL WRITE ONE SMF TYPE 30 RECORD
*   FOR EACH TASK AT TASK TERMINATION IF DESIRED
*
*   FIELD NAMES USED ARE THE SAME AS THOSE SHOWN IN
*   THE IBM SPL:SMF MANUAL
*
*-----
*

```

Offset	Value			
000000		#PMS30	DSECT	11/13/89 14:47:49 06/20/91
		*		
		*-----		
		*		
000000		SMF30LEN	DS H	RECORD LENGTH
000002		SMF30SEG	DS H	SEGMENT DESCRIPTOR - UNUSED
		*		
000004		SMF30FLG	DS X	SYSTEM INDICATOR
	00002	SMF30SUB	EQU X'02'	..SUBSYSTEM ID FOLLOWS SYS ID
	00002	SMF30STY	EQU X'02'	..SUBTYPES UTILIZED
	00002	SMF30MVS	EQU X'02'	..MVS
	00006	SMF30XA	EQU X'06'	..MVS/XA
		*		
000005		SMF30RTY	DS X	SMF RECORD TYPE 30
	0001E	SMF30\$RT	EQU X'1E'	..COMMON ADDRESS SPACE WORK RECORD
		*		
000006		SMF30TME	DS XL4	TIME RECORD WRITTEN (10**-2 SEC)
00000A		SMF30DTE	DS PL4	DATE RECORD WRITTEN (00YYDDDF)
00000E		SMF30SID	DS CL4	SYSTEM IDENTIFIER
000012		SMF30WID	DS CL4	SUBSYSTEM IDENTIFIER
		*		
000016		SMF30STP	DS XL2	SMF RECORD SUBTYPE
	00001	SMF30\$JS	EQU X'01'	..JOB START RECORD TYPE
	00002	SMF30\$IN	EQU X'02'	..INTERVAL RECORD TYPE
	00003	SMF30\$ST	EQU X'03'	..STEP TERMINATION RECORD TYPE
	00004	SMF30\$TO	EQU X'04'	..STEP TOTAL RECORD TYPE
	00005	SMF30\$JT	EQU X'05'	..JOB TERMINATION RECORD TYPE
	00006	SMF30\$SA	EQU X'06'	..SYSTEM ADDRESS SPACE RECORD TYPE
		*		
		*-----		
		*		
000018		SMF30SOF	DS XL4	OFFSET TO SUBSYSTEM SECTION FROM
		*		START OF RECORD, INCLUDING RDW
00001C		SMF30SLN	DS XL2	LENGTH OF SUBSYSTEM SECTION
00001E		SMF30SON	DS XL2	NUMBER OF SUBSYSTEM SECTION
		*		
		*-----		
000020		SMF30IOF	DS XL4	OFFSET TO ID SECTION FROM
		*		START OF RECORD, INCLUDING RDW
000024		SMF30ILN	DS XL2	LENGTH OF IDENTIFICATION SECTION
000026		SMF30ION	DS XL2	NUMBER OF IDENTIFICATION SECTION
		*		
		*-----		
000028		SMF30UOF	DS XL4	OFFSET TO I/O ACTIVITY SECTION FROM

C.3 Performance Monitor record descriptions

00002C		*			START OF RECORD, INCLUDING RDW
00002E		SMF30ULN DS	XL2		LENGTH OF I/O ACTIVITY SECTION
		SMF30UON DS	XL2		NUMBER OF I/O ACTIVITY SECTION
*-----					
000030		SMF30TOF DS	XL4		OFFSET TO COMPLETION SECTION FROM
		*			START OF RECORD, INCLUDING RDW
000034		SMF30TLN DS	XL2		LENGTH OF COMPLETION SECTION
000036		SMF30TON DS	XL2		NUMBER OF COMPLETION SECTION
*-----					
000038		SMF30COF DS	XL4		OFFSET TO PROCESSOR SECTION FROM
		*			START OF RECORD, INCLUDING RDW
00003C		SMF30CLN DS	XL2		LENGTH OF PROCESSOR SECTION
00003E		SMF30CON DS	XL2		NUMBER OF PROCESSOR SECTION
*-----					
000040		SMF30AOF DS	XL4		OFFSET TO ACCOUNTING SECTION FROM
		*			START OF RECORD, INCLUDING RDW
000044		SMF30ALN DS	XL2		LENGTH OF ACCOUNTING SECTION
000046		SMF30AON DS	XL2		NUMBER OF ACCOUNTING SECTION
*-----					
000048		SMF30ROF DS	XL4		OFFSET TO STORAGE SECTION FROM
		*			START OF RECORD, INCLUDING RDW
00004C		SMF30RLN DS	XL2		LENGTH OF STORAGE SECTION
00004E		SMF30RON DS	XL2		NUMBER OF STORAGE SECTION
*-----					
000050		SMF30POF DS	XL4		OFFSET TO PERFORMANCE SECTION FROM
		*			START OF RECORD, INCLUDING RDW
000054		SMF30PLN DS	XL2		LENGTH OF PERFORMANCE SECTION
000056		SMF30PON DS	XL2		NUMBER OF PERFORMANCE SECTION
*-----					
000058		SMF30OOF DS	XL4		OFFSET TO OPERATOR SECTION FROM
		*			START OF RECORD, INCLUDING RDW
00005C		SMF30OLN DS	XL2		LENGTH OF OPERATOR SECTION
00005E		SMF30OON DS	XL2		NUMBER OF OPERATOR SECTION
*-----					
000060		SMF30EOF DS	XL4		OFFSET TO EXCP SECTION FROM
		*			START OF RECORD, INCLUDING RDW
000064		SMF30ELN DS	XL2		LENGTH OF EXCP SECTION
000066		SMF30EON DS	XL2		NUMBER OF EXCP SECTIONS IN PERIOD
000068		SMF30EOR DS	XL2		NUMBER OF EXCP SECTIONS IN
		*			SUBSEQUENT RECORDS
		*			
*-----					
		*	SUBSYSTEM SECTION		
		*			
00006A			DS	0H	
00006A 0003		SMF30TYP DC	XL2'03'		SUBTYPE IDENTIFICATION (ALWAYS 03)
		*	X'01'		..JOB START RECORD TYPE
		*	X'02'		..INTERVAL RECORD TYPE
		*	X'03'		..STEP TERMINATION RECORD TYPE
		*	X'04'		..STEP TOTAL RECORD TYPE
		*	X'05'		..JOB TERMINATION RECORD TYPE
		*	X'06'		..SYSTEM ADDRESS SPACE RECORD TYPE
		*			
00006C		SMF30RS1 DS	XL2		RESERVED
00006E F240		SMF30RVN DC	CL2'2'		RECORD VERSION NUMBER (ALWAYS 2)
000070 D7C5D9C6D4D6D540		SMF30PNM DC	CL8'PERFMON '		SUBSYSTEM OR PRODUCT NAME
		*			
	0000E	S30SACTL EQU	*-SMF30TYP		LENGTH OF SUBSYSTEM SECTION
*-----					
		*	IDENTIFICATION SECTION		
		*			
000078			DS	0H	
000078		SMF30JBN DS	CL8		JOBNAME OF CV JOB
000080		SMF30PGM DS	CL8		PROGRAM NAME IDENTIFIER
		*			..DC/UCF = PROGRAM NAME
		*			..ADSO = DIALOG NAME

C.3 Performance Monitor record descriptions

```

*
* ..ERUS = PROGRAM NAME FROM
* BIND RUNUNIT
*
000088 SMF30STM DS CL8 STEP NAME (TASK CODE IDENTIFIER)
* ..DC/UCF = TASK CODE
* ..ADSO = APPLICATION NAME
* ..BATCH = BATCH JOBNAME
* ..CICS = TRANSACTION ID
*
000090 SMF30UIF DS CL8 USER IDENTIFICATION
* ..DC/UCF = USERID (FIRST 8 BYTES)
* ..CICS = OPERATOR ID
* ..BATCH = BATCH JOBNAME
*
000098 SMF30JNM DS CL8 JES JOB IDENTIFIER-NOT USED
0000A0 0001 SMF30STN DC XL2'0001' STEP NUMBER - ALWAYS 01
0000A2 SMF30CLS DS X JOB CLASS-NOT USED
0000A3 DS X RESERVED
0000A4 SMF30PGN DS XL2 JOB PERFORMANCE GROUP NUM-NOT USED
0000A6 SMF30JPT DS XL2 JES INPUT PRIORITY
0000A8 SMF30AST DS XL4 DEVICE ALLOCATION START TIME
0000AC SMF30PPS DS XL4 PROBLEM PROGRAM START TIME
0000B0 SMF30SIT DS XL4 SAME AS SMF30RST-SEE BELOW
0000B4 SMF30STD DS PL4 SAME AS SMF30RSD-SEE BELOW
0000B8 SMF30RST DS XL4 DC TASK INIT TIME (10**-2 SEC)
0000BC SMF30RSD DS PL4 DC TASK INIT DATE (00YYDDDF)
0000C0 SMF30RET DS XL4 DC TASK END TIME (10**-2 SEC)
0000C4 SMF30RED DS PL4 DC TASK END DATE (00YYDDDF)
0000C8 SMF30USR DS CL20 PROGRAMMERS NAME-NOT USED
0000DC SMF30GRP DS CL8 RACF GROUP ID-NOT USED
0000E4 SMF30RUD DS CL8 RACF USER ID-NOT USED
0000EC SMF30TID DS CL8 RACF TERMINAL ID-NOT USED
0002C SMF30SPC EQU *-SMF30USR
*
0007C S30JACTL EQU *-SMF30JBN LENGTH OF IDENTIFICATION SECTION
*-----*
* COMPLETION SECTION
*
0000F4 DS 0H
0000F4 SMF30SCC DS XL2 COMPLETION INDICATOR
* ..NORMAL COMPLETION = X'0000'
* ..ABEND COMPLETION = X'FFFF'
*
0000F6 SMF30STI DS XL2 STEP TERMINATION INDICATOR
00000 SMF30$NM EQU X'0000' ..NORMAL COMPLETION
00002 SMF30$AB EQU X'0002' ..ABEND
*
0000F8 SMF30ARC DS XL4 ABEND REASON CODE
*
00008 S30LACTL EQU *-SMF30SCC LENGTH OF COMPLETION SECTION
*-----*
* ACCOUNTING SECTION
*
0000FC DS 0H
0000FC SMF30ACL DS XL1 LENGTH OF ACCOUNTING SECTION
* ..DC/UCF = X'28'
* ..CICS ERUS = X'24'
* ..BATCH ERUS = LENGTH OF FIELDS
* X'22' MAX
*
0000FD SMF30SET DS XL3 TASK TOTAL CPU TIME (10**-2 SEC)
*
000100 SMF30NAF DS XL1 # OF ACCOUNTING FIELDS
* ..DC/UCF = X'04'
* ..CICS ERUS = X'04'

```

C.3 Performance Monitor record descriptions

```

*
* ..BATCH ERUS = # OF FIELDS CAPTURED
*                               BY SVC EXIT
000101          SMF30ACT DS    CL36          ACCOUNTING FIELDS

000125          00101          ORG    SMF30ACT
000101          S30DACTF DS    0X          DC/UCF ACCOUNTING FIELDS
000101 08      S30DTSKL DC    XL1'08'     ..TASK CODE LENGTH
000102          S30DTSK  DS    CL8         ..TASK CODE
00010A 08      S30DLTEL DC    XL1'08'     ..LTERM LENGTH
00010B          S30DLTE  DS    CL8         ..LTERM
000113 0C      S30DBLGL DC    XL1'0C'     ..BILLING GROUP LENGTH
000114          S30DBLG  DS    CL12        ..BILLING GROUP
000120 04      S30DTIDL DC    XL1'04'     ..DC TASK ID LENGTH
000121          S30DTID  DS    XL4         ..DC TASK ID (TASK NUMBER)
00024          00024          S30DACTL EQU *-S30DACTF     DC/UCF ACCOUNTING FIELDS LENGTH
*
000125          00101          ORG    SMF30ACT
000101          S30CACTF DS    0X          CICS ERUS ACCOUNTING FIELDS
000101 08      S30CTRNL DC    XL1'08'     ..TRANSACTION ID LENGTH
000102          S30CTRN  DS    CL8         ..TRANSACTION ID
00010A 08      S30CTRML DC    XL1'08'     ..TERMINAL ID LENGTH
00010B          S30CTRM  DS    CL8         ..TERMINAL ID
000113 08      S30COPRL DC    XL1'08'     ..OPERATOR ID LENGTH
000114          S30COPR  DS    CL8         ..OPERATOR ID
00011C 04      S30CTIDL DC    XL1'04'     ..CICS TASK ID LENGTH
00011D          S30CTID  DS    XL4         ..CICS TASK ID (TASK NUMBER)
00020          00020          S30CACTL EQU *-S30CACTF     CICS ERUS ACCOUNTING FIELDS LENGTH
*
000121          00101          ORG    SMF30ACT
000101          S30BACTF DS    CL30        BATCH ERUS = JOBCARD ACCOUNTING INFO
*                               (30 BYTES MAX)
00011F          00125          ORG    ,
00029          00029          S30AACTL EQU *-SMF30ACL     LENGTH OF ACCOUNTING SECTION
*-----
*          STORAGE AND PAGING SECTION
*
000126          DS    0H
000126          SMF30RSV DS    XL2         RESERVED
000128          SMF30SFL DS    XL1         NOT USED
*
000129          SMF30SPK DS    XL1         STORAGE PROTECT KEY OF CV
00012A          SMF30PRV DS    XL2         IDMS PGMPOOL HI WATERMARK IN KBYTES
00012C          SMF30SYS DS    XL2         IDMS STGPOOL HI WATERMARK IN KBYTES
*
00012E          SMF30PGI DS    XL4         NUMBER OF IDMS PAGES READ/Written
000132          SMF30PGO DS    XL4         UNUSED
000136          SMF30REC DS    XL4         UNUSED
00013A          SMF30NSW DS    XL4         UNUSED
00013E          SMF30PSI DS    XL4         UNUSED
000142          SMF30PSO DS    XL4         UNUSED
000146          SMF30VPI DS    XL4         UNUSED
00014A          SMF30VPO DS    XL4         UNUSED
00014E          SMF30VPR DS    XL4         UNUSED
000152          SMF30CPI DS    XL4         UNUSED
000156          SMF30CPR DS    XL4         UNUSED
00015A          SMF30LPI DS    XL4         UNUSED
00015E          SMF30LPR DS    XL4         UNUSED
000162          SMF30PST DS    XL4         UNUSED
000166          SMF30PSC DS    XL8         UNUSED
00016E          SMF30RGB DS    XL4         UNUSED
000172          SMF30ERG DS    XL4         UNUSED
000176          SMF30ARB DS    XL4         UNUSED
00017A          SMF30EAR DS    XL4         UNUSED
00017E          SMF30URB DS    XL4         UNUSED
000182          SMF30EUR DS    XL4         UNUSED
000186          SMF30RGN DS    XL4         UNUSED

```

		*			
	00058	SMF30ZER EQU	*-SMF30PG0		
		*			
	00064	S30PACTL EQU	*-SMF30RSV	LENGTH OF STORAGE/PAGING SECTION	
		*			
		*-----			
00018A	0018A	ORG	,		
		*			
		*-----			
		*			
	0018A	S30DSLEN EQU	*-#PMS30	LENGTH OF SMF30 RECORD	
		*			
		*-----			

C.3.16 #PMSTGDS (PMIM storage pool data)

Offset	Value			
		COPY #PMSTGDS		

		***		***
		***	#PMSTG - PMIM STGPOOL DATA RECORD	***
		***		***

		*		
		*	ONE FOR EACH STORAGE POOL DEFINED IN THE SYSGEN	
		*		

		*		
000000		#PMSTG	DSECT	03:25:30 03/03/88
		*		

		*		
000000		STGHDR	DS 0H	RECORD HEADER
		*		
000000		STGLEN	DS H	RECORD LENGTH (INCLUSIVE)
000002		STGRTYPE	DS X	RECORD TYPE
	0000A	STG\$TYPE	EQU 10	..PMIM STORAGE POOL RECORD
000003		STGSEQ#	DS X	SEQUENCE NUMBER (ALWAYS 1)
000004		STGVER#	DS X	RECORD VERSION
	00001	STG\$VER	EQU 1	..CURRENT VERSION
000005			DS XL3	** RESERVED **
		*		
000008			DS F	** RESERVED **
00000C		STGSDATE	DS PL4	INTERVAL START DATE (00YYDDF)
000010		STGSTIME	DS F	INTERVAL START TIME (10**-4 SEC)
000014		STGEDATE	DS PL4	INTERVAL END DATE (00YYDDF)
000018		STGETIME	DS F	INTERVAL END TIME (10**-4 SEC)
		*		
	0001C	STGHDRLN	EQU *-STGHDR	HEADER LENGTH
		*		

		*		
	0001C	STGDATA	EQU *	START OF STORAGE POOL DATA
		*		
00001C		STGPOLID	DS X	STORAGE POOL ID (0-256) (SCTPNUM)
		*		
00001D		STGTYPE	DS X	STORAGE TYPE FLAGS (SCTTYPE)
	00080	STGSHR	EQU X'80'	..SHARED
	00040	STGSHRK	EQU X'40'	..SHARED-KEPT
	00020	STGUSR	EQU X'20'	..USER
	00010	STGUSRK	EQU X'10'	..USER-KEPT
	00008	STGTRM	EQU X'08'	..TERMINAL
	00004	STGDBA	EQU X'04'	..DATABASE
	00002	STGSYS	EQU X'02'	..SYSTEM
		*		* NOTE: A STG POOL MAY CONTAIN MULTIPLE STORAGE TYPES
		*		* THUS STGTYPE MAY HAVE MULTIPLE BITS TURNED ON
		*		*
00001E			DS H	** RESERVED **
000020		STG#PGS	DS F	# PAGES IN POOL (SCTSIZE)
000024		STGCUSHN	DS F	POOL CUSHION (SCTCUSHN)
		*		
000028		STG#INUS	DS F	# PAGES IN USE AT END OF INTERVAL
00002C		STGHIWAT	DS F	HIGH WATERMARK IN USE
		*		
000030		STG#GETS	DS F	# GETSTGS
000034		STG#FREE	DS F	# FREESTGS
000038		STG#PAS1	DS F	# PASS-1 HITS

C.3 Performance Monitor record descriptions

```

00003C      STG#PAS2 DS   F           # PASS-2 HITS
000040      STG#PAS3 DS   F           # PASS-3 HITS
000044      STG#SOS  DS   F           # TIMES SOS
000048      *
           DS   3F           ** RESERVED **
*
*-----*
*
00054      STGDSLEN EQU  ((*-#PMSTG+3)/4)*4  LENGTH OF LOG RECORD
*
*-----*
*
00038      STGDTLEN EQU  STGDSLEN-STGHDRLN  LENGTH OF RECORD DATA
*
*-----*

```

C.3.17 #PMSTLDS (DC log records data)

```

COPY #PMSTLDS
*****
***
***      #PMSTL - PERFORMANCE MONITOR STATS LOGREC TEXT PORTION  ***
***
*****
*
*      REPLACES THE #STLDS FOR PERFORMANCE MONITOR RECORDS ON
*      THE DC LOG.
*
*      IT DESCRIBES THE DATA IN THE DCLOG RECORDS
*      BEGINNING AT FIELD LGRTEXT
*
*      THIS DOES NOT APPEAR IN PERFORMANCE MONITOR RECORDS
*      WRITTEN TO SMF
*
*-----
*

```

Offset	Value			
000000		#PMSTL	DSECT	12/19/95
		*		
		*-----		
		*		
000000		PMSTYPE	DS X	PERFMON STATS RECTYPE
	000E6	PMSTPMAM	EQU 230	
	000E7	PMSTPMIM	EQU 231	
		*		
000001		PMSPMID	DS X	COMPONENT ID
	00001	PMSPMIM	EQU 1	..INTERVAL MONITOR
	00002	PMSPMAM	EQU 2	..APPLICATION MONITOR
		*		
000002		PMSDCV#	DS H	DC SYSTEM VERSION #
		*		
000004		PMSRID	DS CL4	RELEASE ID
		*		
		*-----		
		*		
000008			DS 0F	..ALIGNMENT
	00008	PMSFIXE	EQU *	END OF FIXED PORTION
	00008	PMSFIXL	EQU PMSFIXE-#PMSTL	LEN OF FIXED PORTION
		*		
		*-----		
		*		
	00008	PMSDLEN	EQU ((*-#PMSTL+3)/4)*4	LENGTH
		*		
		*-----		

C.3.19 #PMTASDS (PMAM task)

Offset	Value			
		COPY #PMTASDS		

		***		***
		***	#PMTAS - PMAM TASK RECORD	***
		***		***

		*		
000000		#PMTAS	DSECT	05/18/88 17:12:45
		*		
		*-----		
		*		
000000		TASHDR	DS 0H	RECORD HEADER
		*		
000000		TASLEN	DS H	RECORD LENGTH (INCLUSIVE)
000002		TASRTYPE	DS X	RECORD TYPE
	00010	TAS\$TYPE	EQU 16	..PMAM TASK STATS RECORD
000003		TASSEQ#	DS X	SEQUENCE NUMBER
000004		TASVER#	DS X	RECORD VERSION
	00001	TAS\$VER	EQU 1	..CURRENT VERSION
000005			DS XL3	** RESERVED **
		*		
000008		TASTSKID	DS F	TASK ID
00000C		TASSDATE	DS PL4	TASK START DATE (00YYDDF)
000010		TASSTIME	DS F	TASK START TIME (10**-4 SEC)
000014		TASEDATE	DS PL4	TASK END DATE (00YYDDF)
000018		TASETIME	DS F	TASK END TIME (10**-4 SEC)
		*		
	0001C	TASHDRLN	EQU *-TASHDR	HEADER LENGTH
		*		
		*-----		
		*		
	0001C	TASDATA	EQU *	START OF TASK STATS DATA
		*		
		*-----		
		*		
		*	PART1 - TASSEQ#=1	
		*		
		*-----		
		*		
		*	TASK IDENTIFICATION	
		*		
00001C		TASTCDID	DS CL8	IDENTIFYING TASK CODE
		*		..IF DC, DC TASKCODE
		*		..IF ADSO, APPLICATION NAME
		*		..IF CICS ERUS, TRANS ID
		*		..IF BATCH ERUS, JOBNAME
		*		..ANY OTHER ERUS, INTX LRELID1
		*		
000024		TASTRMID	DS CL8	IDENTIFYING TERMINAL ID
		*		..IF DC, DC LTERM ID OR OPTIONALLY
		*		ACCESS METHOD SPECIFIC
		*		TERMINAL IDENTIFICATION
		*		(TASAMNAM)
		*		..IF CICS ERUS, TERMINAL ID
		*		..ELSE NOT USED
		*		
00002C		TASPGMID	DS CL8	IDENTIFYING PROGRAM NAME
		*		..IF DC, DC PROGRAM NAME
		*		..IF ADSO, DIALOG NAME
		*		..IF ANY ERUS, PROGRAM NAME

C.3 Performance Monitor record descriptions

```

*
*
* FROM BIND RUNUNIT
*
000034 TASUSRID DS CL8 IDENTIFYING USER ID
* ..IF DC, USER ID (FIRST 8 BYTES)
* ..IF CICS ERUS, OPERATOR ID
* ..ELSE NOT USED
*
*-----*
*
00003C
00080 TASTTYPE DS X TASK TYPE FLAG
TAS$ONLN EQU X'80' ..ONLINE
00040 TAS$BATC EQU X'40' ..BATCH ERUS
00020 TAS$CICS EQU X'20' ..CICS ERUS
00010 TAS$ERUS EQU X'10' ..UNIDENTIFIED ERUS
00008 TAS$SYST EQU X'08' ..SYSTEM TASK OR DRIVER
00004 TAS$TPMN EQU X'04' ..UNIDENTIFIED TPMONITOR
*
00003D TASTTYP2 DS X TASK TYPE FLAG 2
* IF SYSTEM TASK:
00080 TAS$LDRV EQU X'80' ..LINE DRIVER
00040 TAS$SDRV EQU X'40' ..SERVICE DRIVER
00020 TAS$PRTK EQU X'20' ..PRINT TASK
00010 TAS$HLT EQU X'10' ..HELOT TASK
00008 TAS$JNLD EQU X'08' ..JOURNAL DRIVER
00004 TAS$IODR EQU X'04' ..DB I/O WRITE DRIVER
00002 TAS$RDDR EQU X'02' ..DB I/O READ DRIVER
00001 TAS$IOT EQU X'01' ..DB I/O TASK
* IF ONLINE TASK: N.B.:MORE THAN
00080 TAS$ADSO EQU X'80' ..ADSO ONE FLAG MAY
00040 TAS$FACT EQU X'40' ..FACTOTUM BE SET
00020 TAS$UCF EQU X'20' ..UCF
*
*-----*
*
00003E
00080 TASPTYPE DS X PROGRAM TYPE FLAG
TAS$COBL EQU X'80' ..COBOL
00040 TAS$ASM EQU X'40' ..ASSEMBLER (BAL)
00020 TAS$PLI EQU X'20' ..PL/I
00010 TAS$DLG EQU X'10' ..DIALOG
00008 TAS$SUBS EQU X'08' ..SUBSCHEMA
00004 TAS$MAP EQU X'04' ..MAP
00002 TAS$TBL EQU X'02' ..TABLE
00001 TAS$UNDF EQU X'01' ..UNDEFINED
*
00003F TASPRTY DS X TASK PRIORITY
000040 TASPGVER DS H PROGRAM VERSION NUMBER
000042 DS H ** RESERVED **
*
*-----*
*
* TASK VARIABLE DATA
*
000044 TASVDATA DS OF
*
*-----*
*
* DC TASK DATA
*
000044 00044 TASDC EQU *
000044 TASTSKCD DS CL8 ..TASK CODE
000044 TASPGMM DS CL8 ..PROGRAM NAME
000054 TASLTEID DS CL8 ..LTERM ID
00005C TASPTEID DS CL8 ..PTERM ID
000064 TASUSER DS CL32 ..USER ID

```

C.3 Performance Monitor record descriptions

```

*
000084      TASPGDBN DS   CL8      ..PROGRAM DICTNAME
00008C      TASPKNOD DS   CL8      ..PROGRAM DICTNODE
000094      TASLDLST DS   CL8      ..LTERM LOADLIST
*
00009C      TASVNODE DS   0CL8     ..VTAM NODENAME
00009C      TASFEID DS   0CL8     ..UCF FRONTEND ID
00009C      TASAMNAM DS   CL8      ACCESS METHOD TERMINAL IDENTIFIER
*
*          ..VTAM NODENAME
*          ..UCF FRONTEND ID
*          ..SNA TERMINAL NAME
*          ..TCAM TERMINAL NAME
*
0000A4      TASFACCD DS   X        ..FACTOTUM CODE
0000A5      DS   X        ....UNUSED
00062      TASDVLEN EQU  *-TASDC   DC TASK DATA LENGTH
*
*-----
*
*          CICS ERUS TASK DATA
*
0000A6      00044      ORG   TASVDATA
00044      TASCICS EQU  *
000044      TASCITI DS   CL8      ..TRANSACTION ID      (PCTTI)
00004C      TASCPCGM DS   CL8      ..PROGRAM NAME (FROM BIND RUNUNIT)
000054      TASCCTETI DS   CL8     ..TERMINAL NAME      (TCTTETI)
00005C      TASCCLID DS   0CL8     ..LOCAL ID FROM LRE
00005C      TASCCLID1 DS   CL4      ....LRELID1 - IDMSINTC TPNAME
000060      TASCCLID2 DS   XL4      ....LRELID2 - CICS TASK ID
000064      TASCCTEOI DS   CL8     ..OPERATOR ID      (TCTTEOI)
00006C      TASCJBNM DS   CL8     ..CICS REGION JOBNAME
00030      TASCVLEN EQU  *-TASCICS  CICS ERUS DATA LENGTH
*
*-----
*
*          BATCH ERUS TASK DATA
*
000074      00044      ORG   TASVDATA
00044      TASBATCH EQU  *
000044      TASBJBNM DS   CL8      ..JOBNAME
00004C      TASBPGNM DS   CL8     ..PROGRAM NAME (FROM BIND RUNUNIT)
* ACCOUNTING INFORMATION
000054      TASB#FLD DS   X        ..NUMBER OF ACCOUNTING FIELDS
00055      TASBACFD EQU  *        ..START OF ACCOUNTING FIELDS
000055      TASBBALN DS   X        ..TOTAL LENGTH OF BATCH ACCT DATA
000056      TASBFLDS DS   0CL30    ..ACCT FIELD 1 THRU N LEN/DATA
000056      TASBF1LN DS   X        ....FIRST ACCOUNTING FIELD LENGTH
000057      TASBF1FN DS   CL29     ....FIRST FIELD + THE REST OF DATA
00030      TASBVLEN EQU  *-TASBATCH  BATCH ERUS DATA LENGTH
*
*-----
*
*          TPMON ERUS TASK DATA
*
000074      00044      ORG   TASVDATA
00044      TASTPMON EQU  *
000044      DS   CL8      ....UNUSED
00004C      TASTPGNM DS   CL8     ..PROGRAM NAME
000054      DS   CL8     ....UNUSED
00005C      DS   CL8     ....UNUSED
000064      TASTLID DS   0CL8     ..LOCAL ID FROM LRE
000064      TASTLID1 DS   CL4     ....LRELID1 - IDMSINTX TPNAME
000068      TASTLID2 DS   XL4     ....LRELID2
00028      TASTVLEN EQU  *-TASTPMON  TPMON ERUS DATA LENGTH
*
*-----

```

C.3 Performance Monitor record descriptions

```

*
00006C          000A6          ORG      ,
000062          00062          TASVLEN EQU  *-TASVDATA      VARIABLE DATA LENGTH
*
-----
*
*          TASK COMPLETION DATA
*
          PRINT NOGEN
000080          00080          TASABND EQU  X'80'          ..TASK ABEND
000040          00040          TASABRT EQU  X'40'          ..ADS DIALOG ABORT
000020          00020          TASTOUT EQU  X'20'          ..TASK TIMED OUT (SINGLE ECB)
000010          00010          TASTOUL EQU  X'10'          ..TASK TIMED OUT (ECB LIST)
0000A6          000A6          TASTABND DS  X          TASK ABEND FLAG
0000A7          000A7          DS  X          ** RESERVED **
          PRINT GEN
0000A8          000A8          TASABMSG DS  PL4          ABEND MESSAGE NUMBER
0000AC          000AC          TASABCDE DS  CL4          ABEND CODE
*
-----
*
*          TASK ACCOUNTING DATA
*
0000B0          000B0          TASBLGRP DS  CL12          BILLING GROUP (FROM SON)
*
0000BC          000BC          TASUFLD1 DS  CL8          USER FIELDS
0000C4          000C4          TASUFLD2 DS  CL8          ..AVAILABLE FOR USER
0000CC          000CC          TASUFLD3 DS  CL8          ..PERFMON DOES NOT MODIFY
*
-----
*
*          ADSO DATA
*
0000D4          000D4          TASDLGDM DS  CL8          DIALOG NAME      (FDB)
0000DC          000DC          TASAPLNM DS  CL8          APPLICATION NAME (ADB)
0000E4          000E4          TASMXLVL DS  X          MAX # DIALOG LEVELS
0000E5          000E5          TASMXRBB DS  X          MAX # RBBS
0000E6          000E6          TAS#DBLV DS  X          # LEVELS DOING DB WORK AT TASKTERM
0000E7          000E7          DS  XL3          ** RESERVED **
*
-----
*
*          DS  0F
*
0000EC          000EC          TAS1DSL N EQU  *-#PMTAS      PART1 - LENGTH OF RECORD
*
0000D0          000D0          TAS1DTL N EQU  TAS1DSL N-TASHDRLN  PART1 - LENGTH OF RECORD DATA
*
-----
*
*          ORG  TASDATA
*
-----
*
*          PART2 - TAWSEQ#=2
*
-----
*
00001C          0001C          TASDCTRL DS  H   ???          TERMINAL READ LENGTH
00001E          0001E          TASDCTLW DS  H   ???          TERMINAL WRITE LENGTH
*
000020          00020          TASSTGKP DS  F          STG KEPT AT TASK TERMINATION
000024          00024          TASSTGRL DS  F          STG RELOCATED (TO SCRATCH)

```

C.3 Performance Monitor record descriptions

```

000028          TASPGMUS DS    F          PGMPPOOL IN USE AT TASK TERMINATION
00002C          TASPGMHW DS    F          PGMPPOOL HIGH WATER MARK
*-----*
*
*          TASK DC STATISTICS
*
000030          TASPGMCL DS    F          # OF PROGRAMS CALLED
000034          TASPGMLD DS    F          # OF PGMS LOADED
000038          TASTRMRD DS    F          # OF TERMINAL READS
00003C          TASTRMWR DS    F          # OF TERMINAL WRITES
000040          TASTRMER DS    F          # OF TERMINAL ERRORS
000044          TASSTGGT DS    F          # OF GET STORAGE REQUESTS
000048          TASSCRGT DS    F          # OF SCRATCH GETS
00004C          TASSCRPT DS    F          # OF SCRATCH PUTS
000050          TASSCRDL DS    F          # OF SCRATCH DELETES
000054          TASQUEGT DS    F          # OF QUEUE GETS
000058          TASQUEPT DS    F          # OF QUEUE PUTS
00005C          TASQUEDL DS    F          # OF QUEUE DELETES
000060          TASGETIM DS    F          # OF GETTIME REQUESTS
000064          TASSETIM DS    F          # OF SETTIME REQUESTS
000068          TASDBRQS DS    F          # OF DB SERVICE RQSTS (STCDBRQS)
00006C          TASHISTK DS    F          MAX WORDS USED IN STACK
000070          TASTIMUS DS    F          USER MODE TIME (10**-4 SECONDS)
000074          TASTIMSY DS    F          SYSTEM MODE TIME (10**-4 SECONDS)
000078          TASTIMWT DS    F          WAIT TIME (10**-4 SECONDS)
00007C          TASHIRCE DS    F          MAXIMUM NUMBER OF RCE'S USED
000080          TASHIRLE DS    F          MAXIMUM NUMBER OF RLE'S USED
000084          TASHIDPE DS    F          MAXIMUM NUMBER OF DPE'S USED
000088          TASSTGHW DS    F          STORAGE HIGH WATER MARK
00008C          TASSTGFR DS    F          # OF FREE STORAGE REQUESTS
000090          TASSVRQS DS    F          # OF DCSYSTEM SERVICE RQSTS
000094          TASDCEND DS    0F        END OF TASK DC STATS
*
*-----*
*
*          TASK DB STATISTICS
*
*-----*
*
000094          TASPAGRD DS    F          # OF PAGES READ
000098          TASPAGWR DS    F          # OF PAGES WRITTEN
00009C          TASPAGRQ DS    F          # OF PAGES REQUESTED
0000A0          TASCALNO DS    F          # OF CALC RECS WITH NO OFLOW
0000A4          TASCALOF DS    F          # OF CALC RECS WITH OFLOW
0000A8          TASVIANO DS    F          # OF VIA RECS WITH NO OFLOW
0000AC          TASVIAOF DS    F          # OF VIA RECS WITH OFLOW
0000B0          TASRECRQ DS    F          # OF RECORDS REQUESTED
0000B4          TASRECCU DS    F          # OF RECS CURRENT OF RUNUNIT
0000B8          TASDBCLS DS    F          # OF DBMS CALLS (STBDBRQS)
0000BC          TASFRAGS DS    F          # OF FRAGMENTS STORED
0000C0          TASRELO DS    F          # OF RECORDS RELOCATED
0000C4          TASTLOCK DS    F          # OF LOCKS FOR RU
0000C8          TASSLOCK DS    F          # OF SELECT LOCKS FOR RU
0000CC          TASULOCK DS    F          # OF UPDATE LOCKS FOR RU
0000D0          TASDBEND DS    0F        END OF TASK DB STATS
0000D0          TASUPCNT DS    F          # OF RECORDS UPDATED
0000D4          TASCACHE DS    F          # OF RECORDS FOUND IN CACHE
0000D8          TASPFRFET DS    F          # OF RECORDS FOUND IN PREFETCH
0000DC          TASDBEN2 DS    0F        END OF TASK DB STATS
*
0000DC          DS    0F
*
0000DC          TAS2DSL N EQU    *-#PMTAS          PART2 - LENGTH OF RECORD
*
*
0000C0          TAS2DTL N EQU    TAS2DSL N-TASHDR L N          PART2 - LENGTH OF RECORD DATA

```

```

*
*-----
*-----
*
0000DC          0001C          ORG  TASDATA
*
*-----
*
*          PART3 - TAWSEQ#=3
*
*-----
*
*          TASK SQL STATISTICS
*
*-----
*
00001C          TAS#CMD DS   F          # OF SQL COMMANDS EXECUTED
000020          TAS#FET DS   F          # OF ROWS FETCHED
000024          TAS#INS DS   F          # OF ROWS INSERTED
000028          TAS#UPD DS   F          # OF ROWS UPDATED
00002C          TAS#DEL DS   F          # OF ROWS DELETED
000030          TAS#SRT DS   F          # OF SORTS PERFORMED
000034          TAS#SRR DS   F          # OF ROWS SORTED
000038          TAS#SMI DS   F          # OF MINIMUM ROWS SORTED
00003C          TAS#SMX DS   F          # OF MAXIMUM ROWS SORTED
000040          TAS#AMC DS   F          # OF AM RECOMPILES
000044          TASSQEND DS  OF          END OF TASK SQL STATS
*
*
*-----
*
000044          DS   OF
00044          TAS3DSL EQU  *--#PMTAS          PART3 - LENGTH OF RECORD
*
00028          TAS3DTLN EQU  TAS3DSL-TASHDRLN  PART3 - LENGTH OF RECORD DATA
*
*-----
*
000044          000EC          ORG  ,
*
000EC          TASMLEN EQU  ((*--#PMTAS+3)/4)*4  LENGTH OF LONGEST PART
*
*-----

```

C.3.20 #PMTAWDS (PMAM task wait)

```

                                COPY #PMTAWDS
*****
***                               ***
***   #PMTAW - TASK WAIT RECORD   ***
***                               ***
*****
*
*   ONE TASK WAIT RECORD PER TASK
*   IF #PMOPT TASKWAIT=YES
*
*-----
*
Offset           Value
000000             #PMTAW   DSECT                               11/24/95
*
*-----
*
000000             TAWHDR   DS    0H                               RECORD HEADER
*
000000             TAWLEN   DS    H                               RECORD LENGTH      (INCLUSIVE)
000002             TAWRTYPE DS    X                               RECORD TYPE
000003             00011    TAW$TYPE EQU    17                    ..PMAM TASK WAIT RECORD
000004             TAWSEQ#  DS    X                               SEQUENCE NUMBER
000004             TAWVER#  DS    X                               RECORD VERSION
000005             00001    TAW$VER EQU    1                      ..CURRENT VERSION
000005             DS      XL3                                    ** RESERVED **
*
000008             TAWTSKID DS    F                               TASK ID
00000C             TAWSDATE DS    PL4                            TASK START DATE    (00YYDDF)
000010             TAWSTIME DS    F                               TASK START TIME    (10**-4 SEC)
000014             TAWEDATE DS    PL4                            TASK END DATE      (00YYDDF)
000018             TAWETIME DS    F                               TASK END TIME      (10**-4 SEC)
*
0001C             TAWHDLN  EQU   *-TAWHDR                        HEADER LENGTH
*
*-----
*
0001C             TAWDATA  EQU   *                               START OF TASK WAIT DATA
*
*-----
*
*   PART1 - TAWSEQ#=1
*
*-----
*
00001C             DS      F                                     ** RESERVED **
*
000020             TAW1BKTS DS    0F                             PART1 - START OF WAIT TIME BUCKETS
*
000020             TAWDBIR  DS    0F                             DBIO READ WAIT
000020             TAWDBIRT DS    F                             ....SUM OF WAIT TIMES (10**-4 SEC)
000024             TAWDBIRH DS    F                             ....HIGHEST WAIT TIME (10**-4 SEC)
000028             TAWDBIR# DS    F                             ....# WAITS
*
00002C             TAWDBIW  DS    0F                             DBIO WRITE WAITS
00002C             TAWDBIWT DS    F                             ....SUM OF WAIT TIMES (10**-4 SEC)
000030             TAWDBIWH DS    F                             ....HIGHEST WAIT TIME (10**-4 SEC)
000034             TAWDBIW# DS    F                             ....# WAITS
*
000038             TAWFCBX  DS    0F                             DBIO WAITING ON A PRIOR I/O(DOS)
000038             TAWFCBXT DS    F                             ....SUM OF WAIT TIMES (10**-4 SEC)

```

C.3 Performance Monitor record descriptions

00003C	TAWFCBXH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000040	TAWFCBX# DS	F	....# WAITS
	*		
000044	TAWDBFR DS	0F	DB BUFFER WAIT
000044	TAWDBFRT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000048	TAWDBFRH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
00004C	TAWDBFR# DS	F	....# WAITS
	*		
000050	TAWJRLR DS	0F	JRNL READ WAIT
000050	TAWJRLRT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000054	TAWJRLRH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000058	TAWJRLR# DS	F	....# WAITS
	*		
00005C	TAWJRLW DS	0F	JRNL WRITE WAIT
00005C	TAWJRLWT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000060	TAWJRLWH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000064	TAWJRLW# DS	F	....# WAITS
	*		
000068	TAWJBFR DS	0F	JRNL BUFFER WAIT
000068	TAWJBFRRT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
00006C	TAWJBFRH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000070	TAWJBFR# DS	F	....# WAITS
	*		
000074	TAWDBKY DS	0F	DBKEY WAIT
000074	TAWDBKYT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000078	TAWDBKYH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
00007C	TAWDBKY# DS	F	....# WAITS
	*		
000080	TAWLOGR DS	0F	DCLOG READ WAIT
000080	TAWLOGRT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000084	TAWLOGRH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000088	TAWLOGR# DS	F	....# WAITS
	*		
00008C	TAWLOGW DS	0F	DCLOG WRITE WAIT
00008C	TAWLOGWT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000090	TAWLOGWH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000094	TAWLOGW# DS	F	....# WAITS
	*		
000098	TAWLOGS DS	0F	DCLOG SINGLE THREAD WAIT
000098	TAWLOGST DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
00009C	TAWLOGSH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000A0	TAWLOGS# DS	F	....# WAITS
	*		
0000A4	TAWLOGF DS	0F	DCLOG FULL WAIT
0000A4	TAWLOGFT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000A8	TAWLOGFH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000AC	TAWLOGF# DS	F	....# WAITS
	*		
0000B0	TAWSCRRT DS	0F	SCRATCH READ WAIT
0000B0	TAWSCRRT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000B4	TAWSCRRT DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000B8	TAWSCRRT# DS	F	....# WAITS
	*		
0000BC	TAWSCRW DS	0F	SCRATCH WRITE WAIT
0000BC	TAWSCRWT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000C0	TAWSCRWH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000C4	TAWSCRW# DS	F	....# WAITS
	*		
0000C8	TAWSCRSH DS	0F	SCRATCH SINGLE THREAD WAIT
0000C8	TAWSCRST DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000CC	TAWSCRSH DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000D0	TAWSCRSH# DS	F	....# WAITS
	*		
0000D4	TAWQUER DS	0F	QUEUE READ WAIT
0000D4	TAWQUERT DS	F	....SUM OF WAIT TIMES (10**-4 SEC)

C.3 Performance Monitor record descriptions

```

0000D8          TAWQUERH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
0000DC          TAWQUER# DS    F          ....# WAITS
*
0000E0          TAWQUEW  DS    0F          QUEUE WRITE WAIT
0000E0          TAWQUEWT DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
0000E4          TAWQUEWH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
0000E8          TAWQUEW# DS    F          ....# WAITS
*
*-----*
*
0000EC          DS    0F
000EC          TAW1DSL N EQU  *-#PMTAW          PART1 - LENGTH OF RECORD
*
*
00011          TAW1#BKT EQU  17          PART1 - # WAIT BUCKETS
000D0          TAW1DTL N EQU  TAW1DSL N-TAWHDRLN PART1 - LENGTH OF RECORD DATA
*
*-----*
*-----*
*
0000EC          0001C          ORG  TAWDATA
*
*-----*
*
*          PART2 - TAWSEQ#=2
*
*-----*
*
00001C          TAW2BKTS DS    0F          PART2 - START OF WAIT TIME BUCKETS
*
00001C          TAWSTGP  DS    0F          STORAGE POOL WAIT
00001C          TAWSTGPT DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
000020          TAWSTGPH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
000024          TAWSTGP# DS    F          ....# WAITS
*
000028          TAWPGMP  DS    0F          PGM POOL WAIT
000028          TAWPGMPT DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
00002C          TAWPGMPH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
000030          TAWPGMP# DS    F          ....# WAITS
*
000034          TAWPGML  DS    0F          PGM LOAD WAIT
000034          TAWPGMLT DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
000038          TAWPGMLH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
00003C          TAWPGML# DS    F          ....# WAITS
*
000040          TAWLDRS  DS    0F          LOADER SINGLE THREAD WAIT
000040          TAWLDRST DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
000044          TAWLDRSH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
000048          TAWLDRS# DS    F          ....# WAITS
*
00004C          TAWACCS  DS    0F          AREA ACCESS WAIT
00004C          TAWACCST DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
000050          TAWACCSH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
000054          TAWACCS# DS    F          ....# WAITS
*
000058          TAWERUS  DS    0F          ERUS WAIT
000058          TAWERUST DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
00005C          TAWERUSH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
000060          TAWERUS# DS    F          ....# WAITS
*
000064          TAWDDSW  DS    0F          DDS WAIT
000064          TAWDDSWT DS    F          ....SUM OF WAIT TIMES (10***-4 SEC)
000068          TAWDDSWH DS    F          ....HIGHEST WAIT TIME (10***-4 SEC)
00006C          TAWDDSW# DS    F          ....# WAITS
*
000070          TAWCKUS  DS    0F          CHECKUSER SUBTASK WAIT

```

C.3 Performance Monitor record descriptions

000070	TAWCKUST	DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000074	TAWCKUSH	DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000078	TAWCKUS#	DS	F	....# WAITS
	*			
00007C	TAWTPIR	DS	0F	TPIO READ WAIT
00007C	TAWTPIRT	DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000080	TAWTPIRH	DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000084	TAWTPIR#	DS	F	....# WAITS
	*			
000088	TAWTPIW	DS	0F	TPIO WRITE WAIT
000088	TAWTPIWT	DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
00008C	TAWTPIWH	DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
000090	TAWTPIW#	DS	F	....# WAITS
	*			
000094	TAWDBG	DS	0F	DBGROUP WAIT
000094	TAWDBGT	DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
000098	TAWDBGH	DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
00009C	TAWDBG#	DS	F	....# WAITS
	*			
0000A0	TAWSHC	DS	0F	SHARED CACHE WAIT
0000A0	TAWSHCT	DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000A4	TAWSHCH	DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000A8	TAWSHC#	DS	F	....# WAITS
	*			
0000AC	TAWOTHE	DS	0F	OTHER EXTERNAL WAITS
0000AC	TAWOTHET	DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000B0	TAWOTHEH	DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000B4	TAWOTHE#	DS	F	....# WAITS
	*			
0000B8	TAWOTHR	DS	0F	OTHER INTERNAL WAITS
0000B8	TAWOTHRT	DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000BC	TAWOTHRH	DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000C0	TAWOTHR#	DS	F	....# WAITS
	*			
0000C4		DS	0F	** RESERVED **
0000C4		DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000C8		DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000CC		DS	F	....# WAITS
	*			
0000D0		DS	0F	** RESERVED **
0000D0		DS	F	....SUM OF WAIT TIMES (10**-4 SEC)
0000D4		DS	F	....HIGHEST WAIT TIME (10**-4 SEC)
0000D8		DS	F	....# WAITS
	*			

0000DC		DS	0F	
000DC	TAW2DSL	EQU	*-#PMTAW	PART2 - LENGTH OF RECORD
	*			
0000E	TAW2#BKT	EQU	14	PART2 - # WAIT BUCKETS
000C0	TAW2DTLN	EQU	TAW2DSL - TAWHDLN	PART2 - LENGTH OF RECORD DATA
	*			

0000DC	000EC	ORG	,	
	*			
000EC	TAWMXLEN	EQU	((*-#PMTAW+3)/4)*4	LENGTH OF LARGEST PART
	*			
0001F	TAW#BKTS	EQU	TAW1#BKT+TAW2#BKT	# WAIT BUCKETS ENTIRE RECORD
	*			

C.3.21 #PMXLIDS (PMIM data sharing XES list structure information)

```

                                COPY #PMXLIDS
*****12/20/1999
***
*** #PMXLI - PMIM DSG XESList wait record ***
***
*****
*
*-
000000      00000 00018      XLILN  DSECT
* To simplify coding, the 3 wait fullwords are to be first
000000      XLILNTWT DS  F          ...SUM OF WAIT TIMES (10**-4 sec)
000004      XLILNHWT DS  F          ...HIGHEST WAIT TIME (10**-4 sec)
000008      XLILN#WT DS  F          ...# WAITS
00000C      XLILN#R DS  F          # Reads
000010      XLILN#W DS  F          # Writes
000014      XLILN#D DS  F          # Deletes
                                00018      XLILNLEN EQU *-XLILN      Sizeof(resource type info)
*
000000      00000 00074      #PMXLI  DSECT
*
*-----
*
000000      XLIHDR  DS  0H          Record header
*
000000      XLILEN  DS  H          Record length      (inclusive)
000002      XLIRTYPE DS  X          Record type
                                0000E      XLI$TYPE EQU    14          ..PMIM DSG XESList wait record
000003      XLISEQ#  DS  X          Sequence number
000004      XLIVER#  DS  X          Record version
                                00001      XLI$VER  EQU    1          ..Current version
000005      DS  XL3          ** RESERVED **
*
                                DS  F          ** RESERVED **
000008      XLISDATE DS  PL4          Interval start date (0CYYDDDF)
00000C      XLISTIME DS  F          Interval start time (10**-4 sec)
000010      XLIEDATE DS  PL4          Interval end date (0CYYDDDF)
000014      XLIETIME DS  F          Interval end time (10**-4 sec)
*
                                0001C      XLIHDRLN EQU *-XLIHDR      Header length
*
*-----
*
                                00003      XLILIST# EQU  3          Number of lists in record
                                0001C      XLIDATA  EQU  *          Start of data
00001C      XLISTRNM DS  CL16          Structure name
                                00074      XLIDTAIL DS  (XLILIST#)XL(XLILNLEN)
00002C      XLIDSLEN EQU  *-#PMXLI      Length of record
*
                                00058      XLIDTLEN EQU  XLIDSLEN-XLIHDRLN  Length of record data
*
*-----

```

C.3.22 #PMXLKDS (PMIM data sharing XES lock structure information)

```

                                COPY #PMXLKDS
*****12/20/1999
***                                     ***
*** #PMXLK - PMIM DSG XESLock wait record ***
***                                     ***
*****
*
*-
000000      00000 00020  XLKRT   DSECT
* To simplify coding, the 3 wait fullwords are to be first
000000      XLKRTTWT DS   F           ...SUM OF WAIT TIMES (10**-4 sec)
000004      XLKRTHWT DS   F           ...HIGHEST WAIT TIME (10**-4 sec)
000008      XLKRT#WT DS   F           ...# WAITS
00000C      XLKRT#O DS   F           # Obtains
000010      XLKRT#A DS   F           # Alters
000014      XLKRT#R DS   F           # Releases
000018      XLKRT#CX DS   F           # Contention exit runs
00001C      XLKRT#NX DS   F           # Notify exit runs
                                00020  XLKRTLEN EQU  *-XLKRT           Sizeof(resource type info)
*
000000      00000 000EC  #PMXLK   DSECT
*
*-----
*
000000      XLKHDR   DS    0H           Record header
*
000000      XLKLEN   DS    H           Record length           (inclusive)
000002      XLKRTYPE DS    X           Record type
                                0000D  XLK$TYPE EQU    13           ..PMIM DSG XESLock wait record
000003      XLKSEQ#  DS    X           Sequence number
000004      XLKVER#  DS    X           Record version
                                00001  XLK$VER  EQU    1           ..Current version
000005      XLK$VER  DS    XL3         ** RESERVED **
*
                                DS    F           ** RESERVED **
000008      XLKSDATE DS    PL4         Interval start date   (0CYYYYDDF)
00000C      XLKSTIME DS    F           Interval start time   (10**-4 sec)
000010      XLKEDATE DS    PL4         Interval end date     (0CYYYYDDF)
000014      XLKETIME DS    F           Interval end time     (10**-4 sec)
*
                                0001C  XLKHDRLN EQU  *-XLKHDR           Header length
*
*-----
*
                                0001C  XLKDATA  EQU    *           Start of data
00001C      XLKSTRNM DS    CL16        Structure name
*
                                00006  XLKRTP1  EQU    6           Number of resource types in part 1
00002C      XLKDATA1 DS    (XLKRTP1)XL(XLKRTLEN) Space for first 6 res. types
                                000EC  XLKDSL1  EQU  *-#PMXLK           Length of record part 1
0000EC      XLKDSL1  ORG    XLKDATA
                                00002  XLKRTP2  EQU    2           Number of resource types in part 2
00001C      XLKDATA2 DS    (XLKRTP2)XL(XLKRTLEN) Space for last 2 res. types
                                0005C  XLKDSL2  EQU  *-#PMXLK           Length of record part 2
00005C      XLKDSL2  ORG
*
                                000EC  XLKDSLEN EQU  *-#PMXLK           Length of record
*
                                000D0  XLKDTLEN EQU  XLKDSLEN-XLKHDRLN Length of record data
*
*-----

```

C.3.23 #PMXMSDS (PMIM data sharing XCF group member information)

```

                                COPY #PMXMSDS
                                *****12/20/1999
                                ***
                                *** #PMXMS - PMIM DSG XCFMsg wait record ***
                                ***
                                *****
                                *
                                *-
000000          00000 00008    XMSMT  DSECT
000000          XMSMT#S DS  F          # Sends
000004          XMSMT#R DS  F          # Receives
                                00008    XMSMTLEN EQU  *-XMSMT      Sizeof(message type info)
                                *
000000          00000 00070    #PMXMS  DSECT
                                *
                                *-----*
                                *
000000          XMSHDR  DS  0H          Record header
                                *
000000          XMSLEN  DS  H          Record length      (inclusive)
000002          XMSRTYPE DS  X          Record type
                                0000F    XMS$TYPE EQU  15          ..PMIM DSG XCFMsg wait record
000003          XMSSEQ#  DS  X          Sequence number
000004          XMSVER#  DS  X          Record version
                                00001    XMS$VER  EQU  1          ..Current version
000005                   DS  XL3          ** RESERVED **
                                *
                                DS  F          ** RESERVED **
000008          XMS$DATE DS  PL4        Interval start date (0CYYYYDDF)
000010          XMS$TIME DS  F          Interval start time (10**-4 sec)
000014          XMS$DATE DS  PL4        Interval end date (0CYYYYDDF)
000018          XMS$TIME DS  F          Interval end time (10**-4 sec)
                                *
                                0001C    XMSHDRLN EQU  *-XMSHDR      Header length
                                *
                                *-----*
                                *
00001C          DS  0F          Align XMSDATA
                                0001C    XMSDATA  EQU  *          Start of data
00001C          XMSGRPNM DS  XL8        Group name
000024          XMSGMNAM DS  CL8        Group member name
00002C          XMSGMSTA DS  X          Member status
00002D          XMSGMUSP DS  X          User state field: prior state
00002E          XMSGMUSC DS  X          User state field: current state
00002F                   DS  X          Reserved
000030          XMSGMSTD DS  (XMBGMMT#)XL(XMSMTLEN)
                                00070    XMSD$LEN EQU  *-#PMXMS      Length of record
                                *
                                00054    XMSD$TLEN EQU  XMSD$LEN-XMSHDRLN  Length of record data
                                *
                                *-----*

```

C.3.24 #PMYPEDS (PMIM storage type wait)

Offset	Value	
		COPY #PMYPEDS

		*** #PMYPE - PMIM STORAGE TYPE WAIT RECORD ***

		*
		* ONE FOR NON-XA STORAGE
		* ONE FOR XA STORAGE IF PRESENT
		*

		*
000000		#PMYPE DSECT 03:25:56 03/03/88
		*

		*
000000		YPEHDR DS 0H RECORD HEADER
		*
000000		YPELEN DS H RECORD LENGTH (INCLUSIVE)
000002		YPERTYPE DS X RECORD TYPE
	0000B	YPE\$TYPE EQU 11 ..PMIM STORAGE TYPE WAIT RECORD
000003		YPESEQ# DS X RECORD SEQUENCE (ALWAYS 1)
		*
000004		YPEVER# DS X RECORD VERSION
	00001	YPE\$VER EQU 1 ..CURRENT VERSION
000005		DS XL3 ** RESERVED **
		*
000008		DS F ** RESERVED **
00000C		YPE\$DATE DS PL4 INTERVAL START DATE (00YYDDF)
000010		YPE\$TIME DS F INTERVAL START TIME (10**-4 SEC)
000014		YPE\$EDATE DS PL4 INTERVAL END DATE (00YYDDF)
000018		YPE\$ETIME DS F INTERVAL END TIME (10**-4 SEC)
		*
	0001C	YPEH\$RLN EQU *-YPEHDR HEADER LENGTH
		*

		*
	0001C	YPE\$DATA EQU * START OF STORAGE TYPE DATA
		*
00001C		YPE\$SLOC DS XL1 STORAGE LOCATION
	00080	YPE\$ABOV EQU X'80' ..LOCATION ABOVE 16 MEG
	00040	YPE\$BELO EQU X'40' ..LOCATION BELOW 16 MEG
00001D		DS XL3 ** RESERVED **
000020		DS F ** RESERVED **
		*

		*
000024		YPE\$WBKTS DS 0F START OF WAIT TIME STATISTICS
		*
000024		YPE\$SHR DS 0F SHARED STORAGE WAIT
000024		YPE\$SHRT DS F ...SUM OF WAIT TIMES (10**-4 SEC)
000028		YPE\$SHRH DS F ...HIGHEST WAIT TIME (10**-4 SEC)
00002C		YPE\$SHR# DS F ...# WAITS
		*
000030		YPE\$SHRK DS 0F SHARED-KEPT STORAGE WAIT
000030		YPE\$SHRKT DS F ...SUM OF WAIT TIMES (10**-4 SEC)
000034		YPE\$SHRKH DS F ...HIGHEST WAIT TIME (10**-4 SEC)
000038		YPE\$SHRK# DS F ...# WAITS
		*
00003C		YPE\$USR DS 0F USER STORAGE WAIT

C.3 Performance Monitor record descriptions

```

00003C      YPEUSRT DS   F      ....SUM OF WAIT TIMES (10**-4 SEC)
000040      YPEUSRH DS   F      ....HIGHEST WAIT TIME (10**-4 SEC)
000044      YPEUSR# DS   F      ....# WAITS
*
000048      YPEUSRK DS  0F      USER-KEPT STORAGE WAIT
000048      YPEUSRKT DS   F      ....SUM OF WAIT TIMES (10**-4 SEC)
00004C      YPEUSRKH DS   F      ....HIGHEST WAIT TIME (10**-4 SEC)
000050      YPEUSRK# DS   F      ....# WAITS
*
000054      YPETRM  DS  0F      TERMINAL STORAGE WAIT
000054      YPETRMT DS   F      ....SUM OF WAIT TIMES (10**-4 SEC)
000058      YPETRMH DS   F      ....HIGHEST WAIT TIME (10**-4 SEC)
00005C      YPETRM# DS   F      ....# WAITS
*
000060      YPEDBA  DS  0F      DATABASE STORAGE WAIT
000060      YPEDBAT DS   F      ....SUM OF WAIT TIMES (10**-4 SEC)
000064      YPEDBAH DS   F      ....HIGHEST WAIT TIME (10**-4 SEC)
000068      YPEDBA# DS   F      ....# WAITS
*
00006C      YPESYS  DS  0F      SYSTEM STORAGE WAIT
00006C      YPESYST DS   F      ....SUM OF WAIT TIMES (10**-4 SEC)
000070      YPESYSH DS   F      ....HIGHEST WAIT TIME (10**-4 SEC)
000074      YPESYS# DS   F      ....# WAITS
*
000078      DS      0F      ** RESERVED **
000078      DS      F      ....SUM OF WAIT TIMES (10**-4 SEC)
00007C      DS      F      ....HIGHEST WAIT TIME (10**-4 SEC)
000080      DS      F      ....# WAITS
*
*-----
*
00084      YPEDSLEN EQU  ((*-#PMYPE+3)/4)*4  LENGTH OF RECORD
*
*-----
*
00007      YPE#BKTS EQU  7                # WAIT BUCKETS
00068      YPEDTLEN EQU  YPEDSLEN-YPEHDLN  LENGTH OF RECORD DATA
*
*-----

```

Index

Special Characters

#PMARADS C-7
#PMBUFDS C-10
#PMCDMDS C-12
#PMDBGDS C-13
#PMDBKDS C-14
#PMGEN macro
 saving revised screen displays B-5
 tailoring task codes B-7
#PMHDRDS C-16
#PMINSDS C-18
#PMINTDS C-20
#PMJRLDS C-25
#PMLNEDS C-27
#PMOPT macro
 OS/390 1-4
#PMPGMDS C-29
#PMRUSDS C-31
#PMS30 C-37
#PMSM4DS C-34
#PMSMHDS C-33
#PMSTGDS C-42
#PMSTLDS C-44
#PMSVXDS C-45
#PMTASDS C-46
#PMTAWDS C-52
#PMXLIDS C-56
#PMXLKDS C-57
#PMXMSDS C-58
#PMYPEDS C-59

A

abend
 See abnormal termination
abnormal termination
 detail report 4-29—4-30
 summary report 4-30
Application Monitor
 batch reports 4-3—4-55
 report samples 4-15—4-55
 report selection keywords 4-13
 report summary 4-3—4-4
 report syntax 4-6—4-11
archiving
 PMSMFEX 2-15
 using DCLOG 2-14

archiving (*continued*)
 using DDLDCLOG 2-4
 using SMF (OS/390 only) 2-15—2-19

B

billing groups
 See also report/billing groups
 detail report 4-25—4-27
 summary report 4-27—4-29

C

CA-ADS
 dialog detail report 4-20
 dialog summary report 4-21
CHANGE statement (VSE/ESA) 2-28, 2-29
COPY parameters, replacing 2-28
COPY parameters, replacing for tape input 2-29

D

data collection, initializing 1-8
database
 detail report 4-36—4-38
 summary report 4-39
DC/UCF
 statistics detail report 4-40—4-42
 statistics summary report 4-42—4-43
DC/UCF system
 See system
DDR-only information 2-30—2-31
detail report
 buffer 3-48—3-49
 CDMSLIB 3-50
 I/O by area 3-44—3-45
 I/O by file 3-46—3-47
 journal 3-51—3-52
 journal block full 3-60—3-62—3-66
 program pool 3-53—3-54
 storage type 3-55—3-56
detail wait report
 buffer 3-28
 db-key/area 3-19—3-20
 summary 3-17—3-18
DSECTS
 See record descriptions

I

input processing summary

PMARPT99 4-53—4-55

PMIRPT99 3-67—3-69

Interval Monitor

report selection keywords 3-11—3-13

report summary 3-3—3-4

report syntax 3-6—3-10

L

load balancing, central versions 4-50

logical terminals

detail report 4-31

summary report 4-32

M

machine-readable statistics 3-66, 4-51

macros

See #PMGEN macro

management summary report 3-15—3-16

modifying Performance Monitor B-3—B-9

customized screen displays B-4—B-6

tailoring task codes B-7

P

physical terminals

detail report 4-33

summary report 4-34

PM-STATEMENTS module B-7

PMAMINIT

PMARPT01 (task detail) 4-15—4-17

PMARPT02 (task summary) 4-17—4-19

PMARPT03 (CA-ADS dialog detail) 4-20

PMARPT04 (CA-ADS dialog summary) 4-21

PMARPT05 (user detail) 4-21—4-23

PMARPT06 (user summary) 4-24—4-25

PMARPT07 (billing group detail) 4-25—4-27

PMARPT08 (billing group summary) 4-27—4-29

PMARPT09 (abnormal termination detail) 4-29—4-30

PMARPT10 (abnormal termination summary) 4-30

PMARPT11 (LTERM detail) 4-31

PMARPT12 (LTERM summary) 4-32

PMARPT13 (PTERM detail) 4-33

PMARPT14 (PTERM summary) 4-34

PMARPT16 (system summary) 4-36

PMARPT17 (database detail) 4-36—4-38

PMARPT18 (database summary) 4-39

PMARPT19 (DC statistics detail) 4-40—4-42

PMARPT20 (DC statistics summary) 4-42—4-43

PMARPT31 (task wait summary) 4-44—4-45

PMARPT36 (task wait detail) 4-46—4-49

PMARPT80 (load balance by day and cv) 4-49—4-50

PMARPT81 (load balancing by central version) 4-50

PMARPT82 (load balancing all central versions) 4-51

PMARPT90 (machine-readable copy) 4-51

PMARPT97 (summary recap) 4-52—4-53

PMARPT99 (input processing summary) 4-53—4-55

PMIMINIT

PMIRPT01 (management summary report) 3-15—3-16

PMIRPT02 (trend analysis report) 3-16

PMIRPT04 (detail wait report - summary) 3-17—3-18

PMIRPT05 (detail wait report - db-key/area) 3-19—3-20

PMIRPT09 (shared cache summary) 3-20—3-21

PMIRPT10 (DBGGroup summary) 3-22

PMIRPT10 (detail wait report - buffer) 3-28

PMIRPT11 (I/O by area summary) 3-22—3-24

PMIRPT12 (I/O by file summary) 3-24—3-26

PMIRPT13 (buffer summary report) 3-26

PMIRPT14 (CDMSLIB summary) 3-29

PMIRPT15 (journal summary) 3-29—3-31

PMIRPT16 (TP line summary) 3-32—3-34

PMIRPT17 (program pool summary) 3-35—3-37

PMIRPT18 (storage pool summary) 3-38—3-40

PMIRPT19 (storage type summary) 3-41—3-43

PMIRPT21 (I/O by area detail) 3-44—3-45

PMIRPT22 (I/O by file detail) 3-46—3-47

PMIRPT23 (buffer detail) 3-48—3-49

PMIRPT24 (CDMSLIB detail) 3-50

PMIRPT25 (journal detail) 3-51—3-52

PMIRPT27 (program pool detail) 3-53—3-54

PMIRPT29 (storage type detail) 3-55—3-56

PMIRPT30 (interval statistics summary) 3-57—3-58

PMIRPT32 (run unit statistics summary) 3-59—3-60

PMIRPT38 (journal block full detail) 3-60—3-62

PMIRPT40 (data sharing SYSPLEX detail) 3-62

PMIRPT40 (journal block full detail) 3-66

PMIRPT90 (Machine-Readable copy) 3-66

PMIRPT99 (input processing summary) 3-67—3-69

PMRTINIT

PMSMFEX 2-15

processing options

task code entry B-8—B-9

R

record descriptions C-3—C-60

Record formats

Performance Monitor format C-4

refresh time for data collection 1-8
report/billing groups
reports
 Application Monitor 4-3—4-55
 Application Monitor selection keywords 4-13
 DDR note 2-30—2-31
 execution JCL sample 2-20—2-27
 Interval Monitor 3-3—3-69
 Interval Monitor selection keywords 3-11—3-13
 PMARPT01 4-15—4-17
 PMARPT02 4-17—4-19
 PMARPT03 4-20
 PMARPT04 4-21
 PMARPT05 4-21—4-23
 PMARPT06 4-24—4-25
 PMARPT07 4-25—4-27
 PMARPT08 4-27—4-29
 PMARPT09 4-29—4-30
 PMARPT10 4-30
 PMARPT11 4-31
 PMARPT12 4-32
 PMARPT13 4-33
 PMARPT14 4-34
 PMARPT15 4-35
 PMARPT16 4-36
 PMARPT17 4-36—4-38
 PMARPT18 4-39
 PMARPT19 4-40—4-42
 PMARPT20 4-42—4-43
 PMARPT31 4-44—4-45
 PMARPT36 4-46—4-49
 PMARPT80 4-49—4-50
 PMARPT81 4-50
 PMARPT82 4-51
 PMARPT90 4-51
 PMARPT97 4-52—4-53
 PMARPT99 4-53—4-55
 PMIRPT01 3-15—3-16
 PMIRPT02 3-16
 PMIRPT04 3-17—3-18
 PMIRPT05 3-19—3-20
 PMIRPT09 3-20—3-21
 PMIRPT10 3-22, 3-28
 PMIRPT11 3-22—3-24
 PMIRPT12 3-24—3-26
 PMIRPT13 3-26
 PMIRPT14 3-29
 PMIRPT15 3-29—3-31
 PMIRPT16 3-32—3-34
 PMIRPT17 3-35—3-37
 PMIRPT18 3-38—3-40

reports (*continued*)
 PMIRPT19 3-41—3-43
 PMIRPT21 3-44—3-45
 PMIRPT22 3-46—3-47
 PMIRPT23 3-48—3-49
 PMIRPT24 3-50
 PMIRPT25 3-51—3-52
 PMIRPT27 3-53—3-54
 PMIRPT29 3-55—3-56
 PMIRPT30 3-57—3-58
 PMIRPT32 3-59—3-60
 PMIRPT38 3-60—3-62
 PMIRPT40 3-62—3-66
 PMIRPT90 3-66
 PMIRPT99 3-67—3-69
 preparation 2-3—2-31
 requesting (Application Monitor) 4-5—4-14
 requesting (Interval Monitor) 3-5—3-13
 samples 3-14—3-69
reports, under VSE/ESA 2-28, 2-29

S

security
 See #PMGEN macro
 See #RTEOPT
 See modifying Performance Monitor
SMF
 See also archiving
 record format C-5
 type 30 note 2-3
 type 4 note 2-3
statistics summary report
 See DC/UCF
summary report
 buffer 3-26
 CDMSLIB 3-29
 DBGGroup 3-22
 I/O by area 3-22—3-24
 I/O by file 3-24—3-26
 interval statistics 3-57—3-58
 journal 3-29—3-31
 program pool 3-35
 run unit statistics 3-59—3-60
 shared cache 3-20—3-21
 storage pool 3-38—3-40
 storage type 3-41—3-43
 TP line 3-32—3-34
system
 detail report 4-35
 summary report 4-36

T

task code entry option B-8—B-9

tasks

 detail report 4-15—4-17

 summary report 4-17—4-19

trend analysis report 3-16

U

USE statement (VSE/ESA) 2-28, 2-29

users

 detail report 4-21—4-23

 summary report) 4-24—4-25

V

VSE/ESA users, note for 2-28, 2-29

